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ANNUAL

ADMINISTRATION REPORT

OF

THE FOREST DEPARTMENT

MADRAS PRESIDENCY,

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1894.

(1893-94.)

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

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GENERAL SECRETARIAT LIBRARY

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY

FOR THE TWELVE MONTHS ENDING WITH 30TH JUNE 1894.

CHAPTER I.

INTRODUCTORY.

The Forest year.—This report embodies the transactions of the twelve months ending with the 30th June 1894. The last report having been for fifteen months, the figures of the two reports cannot be easily compared.

2 *Revision of the Forest Code.*—Mr R. C C Carr, I.C.S, was placed on special duty for three months to revise the Madras Forest Code. The revised edition drafted by him is now awaiting the approval of Government. Mr. Carr's services were also utilized by the Board in revising the rules under section 26 of the Forest Act. The revised rules have since received the approval of Government

3. *Tours of the Forest Member.*—The following table shows the tours made by the Forest Member of the Board.—

Name of Forest Member.	Period of charge	Duration of tours	Locality visited	Purpose of journey
The Hon'ble Mr A T Arundel	From 1st July 1893 to 8th January 1894	27th July to 23rd August 1893	Kollegal in Coimbatore, Anantapur, Kurnool and Cuddapah	Inspection of forest settlement, &c
		13th October to 4th November 1893	Polavaram, Wodigudem, Bhádrachalam and Rampa in Gódávari	To report on the conservancy of the Agency forests in Gódávari under orders of Government.
		17th December 1893 to 7th January 1894	Mount Stuart in Coimbatore and the Nilgiris	Forest inspection
The Hon'ble Mr J. Sturrock.	From 9th January 1894 to the end of the year under report	13th to 21st March 1894.	Cuddapah ..	Conference with the Collector and the District Forest-officer
			Sriharikóta and Penubakam in Nellore	Forest inspection
		22nd to 28th March 1894	Yercaud in Salem	Forest inspection in connection with applications for lands in reserved forests for coffee cultivation
		19th May to 2nd June 1894	Kodaikánal in Madura and the Lower Palnis	Forest inspection

4. *Conservators' inspections.*—The following table shows the time spent in camp and the inspections made by each of the Conservators during the year under report:—

Circle	Name of Conservator.	Number of days in charge	Number of days spent in camp	Districts visited.	Districts for which inspection notes were submitted to the Board	District Forest offices inspected
Northern ..	Mr A W Peet ..	365	187	All the districts except Anantapur	Gódavari and Kistna	Kistna
Central ..	Mr E. P Popert ..	365	185	All the districts	South Arcot and Trichinopoly	All the District Forest offices except Chingleput and Nellore.
Southern..	Mr. J W Cherry ..	304	191	Do	All the districts except South Canara	Madura, Tinnevelly, Nilgiris, North Malabar and North Coimbatore
	Mr. H A Gass ..	61	43			

REMARKS.—The Vizagapatam district is said to have been inspected by Mr Peet, but his inspection notes have not been received

The touring of these officers has been satisfactory.

5. *Touring of District Forest-officers.*—The minimum period of touring of four months in every half-year prescribed for District Forest-officers having been found to be excessive, it was reduced to six months in the year.

The only officer whose actual touring fell far short of the minimum was Mr. Eber Hardie, District Forest-officer, North Malabar, who was ill and subsequently obtained furlough.

6. *Inspection of Range offices by District Forest-officers.*—The rule regarding the inspection of each Range office at least once in every half-year does not appear to have been observed in several districts, in spite of the fact that attention was drawn to the omission in the last two annual reports. The only districts in which the rule was strictly observed are Vizagapatam, Kistna, Bellary, Chingleput, Tinnevelly, South Coimbatore and Malabar.

7. *Audit of the accounts of the District Forest office.*—The Local Fund inspecting staff in the Accountant-General's office audited the accounts of all the District Forest offices, except Bellary, Nellore, Chingleput and North Arcot; the accounts of Ganjám, Vizagapatam and North and South Coimbatore were inspected twice during the year under report. No serious errors or irregularities were brought to notice, but petty mistakes, omissions and delays were numerous, and will it is feared continue, so long as sanction is withheld from the proposals which have been submitted for the reorganization of the District Forest-officer's office establishments, which are admittedly undermanned and underpaid.

8. *Reorganization of the Subordinate staff.*—Proposals to reorganize and strengthen the subordinate staff are still under correspondence with the Government of India. Meanwhile complaints of the inadequacy of the establishment are rife and measures for the improvement of the forests or the development of communications have to be postponed to the more pressing necessities of maintaining the existing revenue and the selection, demarcation and mapping of reserves.

Of the 23 District Forest charges, fifteen were in charge of Deputy Conservators, four in charge of Assistant Conservators and four in charge of Extra Assistants on the last day of the year under report.

CHAPTER II.

AREAS AND BOUNDARIES.

9. The following abstract shows the areas of reserved forests and reserved lands at the commencement and at the close of the year :—

ABSTRACT A.—Classes and areas of forests.

Class of forests	Area on 1st July 1893	Added during the year 1893-94	Excluded during the year 1893-94	Net increase or decrease	Area on 30th June 1894
Northern Circle	SQ MLS	SQ MLS	SQ MLS	SQ MLS	SQ. MLS.
Reserved forests	3,254	(a) 338, (b) 8	(b) 12	+ 354	3,608
Do. lands	2,297	(c) 464, (b) 11	(d) 358, (b) 4, (e) 12, (f) 3	+ 88	2,385
Total	5,551	831	389	+ 442	5,993
Central Circle					
Reserved forests	3,707	(a) 583, (b) 15	(b) 6, (g) 3	+ 589	4,296
Do lands	2,512	(c) 275, (b) 22	(d) 583, (b) 28, (e) 18, (f) 1	— 333	2,179
Total	6,219	895	639	+ 256	6,475
Southern Circle					
Reserved forests	2,475	(a) 407		+ 407	2,882
Do. lands	2,942	(c) 121, (b) 33	(d) 407, (b) 20, (e) 6, (f) 3	— 282	2,660
Total	5,417	561	436	+ 125	5,542
Total					
Reserved forests	9,436	(a) 1,348, (b) 23	(b) 18, (g) 3	+ 1,350	10,786
Do. lands	7,751	(c) 850, (b) 66	(d) 1,348, (b) 52, (e) 36, (f) 7	— 527	7,224
Grand Total	17,187	2,287	1,464	+ 823	18,010

(a) Transferred from reserved lands (b) By rectification of area (c) Newly constituted reserved lands.
(d) Transferred to reserved forests (e) Excluded at Settlement (f) Unreserved (g) Disafforested

The net result is an increase of 823 square miles in the total area reserved under the Forest Act Large areas were notified as reserved forests during the year in Anantapur, Cuddapah, North Arcot and North Coimbatore. The principal addition to reserved lands was in Kistna in the Northern Circle.

10. The area of each district and of the reserved forests and reserved lands therein is shown in the annexed statement :—

Abstract B.—District areas and forest reserves.

Districts.	Total district area excluding feudatory and tributary states.	Area excluding zemindari and whole inam villages.	Cultivated area.	Particulars of remaining area (column 3—column 4).			Forests under the control of the Forest Department.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
				Uncultivated and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V. of 1882.	Reserved lands.	Total of reserves, columns 8 and 9.		
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjám	8,369	4,079	582	1,260	2,237	3,497	133	441	574	14·0	16·4
Vizagapatam	17,242	1,373	234	232	907	1,139	29	274	303	22·0	26·6
Gódávari	7,865	3,823	1,524	1,831	468	2,299	498	503	1,001	26·1	43·5
Kistna	8,397	5,414	3,108	2,306	..	2,306	627	545	1,172	21·6	50·8
Anantapur	5,287	4,321	1,702	2,217	402	2,619	302	140	442	10·2	16·8
Bellary	5,900	4,586	2,422	2,164	..	2,164	285	262	547	11·9	25·2
Kurnool	7,514	5,924	1,854	4,070	..	4,070	1,734	220	1,954	32·9	48·0
Total ..	60,574	29,520	11,426	14,080	4,014	18,094	3,608	2,385	5,993	20·3	33·1
Central Circle.											
Nellore	8,765	4,045	1,559	2,394	92	2,486	343	258	601	14·8	24·1
Cuddapah	8,731	7,496	1,961	5,535	..	5,535	1,204	942	2,146	28·6	38·7
Chingleput	2,840	2,051	896	1,155	..	1,155	169	70	239	11·6	20·6
North Arcot	7,497	3,768	1,179	2,589	..	2,589	937	129	1,066	28·2	41·1
South Arcot	5,211	4,726	2,233	2,417	76	2,493	407	436	843	17·8	33·8
Tanjore	3,709	2,485	1,717	768	..	768	19	5	24	·9	3·1
Trichinopoly	3,631	2,683	1,635	894	154	1,048	190	50	240	8·9	22·9
Salem	7,471	5,330	1,969	3,361	..	3,361	1,027	289	1,316	24·6	39·1
Total ..	47,855	32,584	13,149	19,113	322	19,435	4,296	2,179	6,475	19·8	33·3
Southern Circle.											
Madura	8,808	3,196	1,516	1,252	438	1,680	524	127	651	20·3	38·7
Tinnevelly	5,384	3,508	2,286	1,222	..	1,222	410	1	411	11·7	33·6
Coimbatore	7,860	7,167	3,727	3,250	190	3,440	1,404	924	2,328	32·4	67·6
Nilgiris	957	957	325	632	..	632	248	189	437	45·6	69·1
Malabar	5,589	5,565	1,475	4,090	..	4,090	190	413	603	10·8	14·7
South Canara	3,902	3,883	634	3,249	..	3,249	106	1,006	1,112	28·6	34·2
Total ..	32,500	24,276	9,963	13,695	618	14,313	2,882	2,660	5,542	22·8	38·7
Grand Total ..	140,929	86,380	34,538	46,888	4,954	51,842	10,786	7,224	18,010	20·8	34·7

Note.—As the figures of district areas for 1893-94 are not available in the Settlement Department (Board of Revenue), the figures adopted for 1892-93 have been taken for the year under report.

The percentage of the area reserved under the Forest Act to the total area at the disposal of Government has risen from 33·1 on the 30th June 1893 to 34·7 on the 30th June 1894. The variations in the percentage of the area reserved to the total area at the disposal of Government in the several districts were explained in last year's report. In the *Anantapur* district, further reservation is in progress and the maximum area to be ultimately taken up has not yet been determined.

11. The subjoined statement shows by districts the area finally constituted reserved forests during the year :—

ABSTRACT C.—Reserved Forests in square miles.

Districts.	Prior to 1892-93	During 1892-93 (fifteen months)	During 1893-94.	Total.
Northern Circle.	SQ. MLS	SQ. MLS	SQ. MLS	SQ. MLS
Ganjám	114	..	19	133
Vizagapatam	14	10	5	29
Gódávari	418	24	56	498
Kistna	452	181	*—6	627
Anantapur	31	70	201	302
Bellary	105	109	71	285
Kurnool	1,068	658	(a) 8	1,734
Total ..	2,202	1,052	354	3,608
Central Circle.				
Nellore	263	78	2	343
Cuddapah	414	551	239	1,204
Chingleput	146	9	14	169
North Arcot	513	175	249	937
South Arcot	164	221	22	407
Tanjore	9	7	3	19
Trichinopoly	159	31*	..	190
Salem	762	205	60	1,027
Total ..	2,430	1,277	589	4,296
Southern Circle.				
Madura	467	12	45	524
Tinnevelly	567	†— 157	..	410
North Coimbatore	485	12	341	838
South Coimbatore	566	..	..	566
Nilgiris	207	26	15	248
North Malabar	119	32	..	151
South Malabar	39	..	..	39
South Canara	93	7	6	106
Total ..	2,543	— 68	407	2,882
Grand Total ..	7,175	2,261	1,350	10,786

* Three square miles were added, but nine square miles had to be deducted in consequence of rectification of area

† Twenty one square miles were added to the reserved forests, but 178 square miles had to be deducted in consequence of rectification of areas due to survey map measurements

(a) By rectification of area

During 1892–93 large areas which had been settled in previous years were notified as reserved forests under section 16, as explained in para. 11 of the last report.

During 1893–94, the progress of forest settlement in *Kistna* was retarded as the Special Forest Settlement-officer was engaged in other districts until towards the close of the year. In *Kurnool* one block was finally notified during the year, but its reservation does not take effect till 1894–95; the Special Forest Settlement-officer was engaged in this district for only two months during the year. The area constituted reserved forests in Ganjám, Vizagapatam, Chingleput, South Canara, Nellore, South Arcot, Tanjore and Nilgiris is comparatively small. In the first four districts, the forest settlement work is entrusted to Revenue Divisional officers who are not able to devote sufficient time to it in addition to their other duties. In *Nellore* and *Nilgiris* the reports of several large blocks, the settlement of which had been completed, were either pending scrutiny in the Board's office or had been returned to the Collectors for revision. In *South Arcot*, a number of small blocks were settled during the year, but the reports had not reached the Board before its close. The settlement of some of the old blocks in the district is delayed pending the rectification of the boundaries by the District Forest-officer. In *Tanjore* and *Tinnevelly* the whole of the area brought under settlement has been notified under section 16. In *Trichinopoly* and *South Coimbatore* there was only a very small area under settlement. In *Malabar* the large blocks had all been settled, but the final reports were pending for various reasons.

The area constituted reserved forest in a given year affords no criterion of the work done by the Forest Settlement-officers since final notifications are not always published during the year in which settlement operations were completed.

12. The appended statement shows the progress of forest settlement in the form prescribed by the Government of India.

ABSTRACT D.

Circle.	Area of reserved lands—*vide* Abstract A above.					Area brought under Chapter II of the Madras Forest Act.				
	On 1st July 1893.	Added during 1893-94.	Total.	Excluded during the year mainly by reason of constitution as reserved forests	Balance at the end of the year.	Area notified under section 4 and not constituted reserved forests on 1st July 1893.	Added during 1893-94.	Total.	Constituted reserved forests during 1893-94.	Balance notified under section 4 but not constituted reserved forests.
	SQ MS	SQ MS	SQ. MS	SQ MS	SQ MS	SQ MS	SQ MS	SQ MS	SQ. MS	SQ MS.
Northern ..	2,297	465	2,762	377	2,385	2,104	157	2,261	354	1,907
Central ..	2,512	297	2,809	630	2,179	2,216	266	2,482	589	1,893
Southern ..	2,942	154	3,096	436	2,660	1,762	163	1,925	407	1,518
Total ..	7,751	916	8,667	1,443	7,224	6,082	586	6,668	1,350	5,318

The diminution in the area notified under section 4 during the year is accounted for by the fact that in some districts the maximum of reservation has been nearly reached, while, in others, there has been delay in demarcating, and in preparing maps for selected blocks.

13. The statement in Appendix A shows for each district the total area brought under settlement up to the end of the year under report, the total area constituted reserved forests, and the particulars of the balance under settlement on the 30th June 1894.

It will be seen from it that there were 758 blocks with an area of 5,318 square miles not constituted reserved forests at the end of the year, of which 187 blocks covering an area of 2,320 square miles had been settled and reported on as shown below:—

44 blocks of 128 square miles notified under section 16 during the year, but with effect from dates falling with in the current year.
69 blocks of 314 square miles pending [either with the Board or Government] publication of notifications under section 16.
74 blocks of 1,878 square miles returned by the Board for revision and pending either with the District Forest-officer, Collector or Forest Settlement-officer.

254 blocks [1,608 square miles] had been settled but were not reported on before the close of the year; of these,

53 were awaiting preparation of maps.
27 „ „ disposal of appeals.
24 „ „ expiration of time prescribed for appeals.
125 „ „ preparation or submission of final reports by Forest Settlement officers or Collectors.
25 „ „ awaiting replies to references made to Collectors or Board.

317 blocks [1,390 square miles] were pending with the Forest Settlement officers in various stages of settlement.

The progress made in the notification of old blocks in the Anantapur and Cuddapah districts is satisfactory; but in the Ganjám, Godavari, Bellary, Nellore, South Arcot, Salem, North Malabar, South Malabar and South Canara districts, not much improvement is perceptible in this direction. In the first three and the last three of these districts, the delay was mainly due to the inability of the Revenue Divisional officers who were entrusted with their settlement to make satisfactory progress, the time at their disposal for the extra work being more or less limited. Almost all

the old blocks pending in *Gódávari* have been since transferred to a Special Forest Settlement-officer. The work in *Bellary* is being expedited; most of the pending blocks are said to have been reported on. In *Nellore*, all the blocks excepting one were settled and reported on. In *South Arcot*, the reports were returned by the Board and were under revision. In *Salem*, final reports were delayed pending disposal of appeals against Forest Settlement officer's decisions which have been since disposed of. In *North Malabar*, the settlement remained unfinished owing to the pendency of certain appeals in the High Court which were only recently disposed of. In *South Malabar* all the old blocks were pending disposal of appeals. Of the two old blocks in *South Canara* the report of one was pending with the Board and that of the other was awaited from the Forest Settlement officer.

A statement showing the cause of the pendency of the blocks not yet constituted reserved forests is given in appendix B.

As compared with the corresponding figures for 1893 the number of blocks pending on the 30th June shows an increase while there is a decrease in the aggregate area, thus:—

Date.	Settled and reported on but not constituted reserved forest.		Under settlement.		Total.	
	Number.	Area.	Number.	Area.	Number.	Area.
		SQ. MS.		SQ. MS.		SQ. MS.
30th June 1893 ..	186	2,317	489	3,765	675	6,082
30th June 1894 ..	187	2,320	571	2,998	758	5,318

14. *Selections for further reservation.*—The subjoined statement shows the area that will eventually be reserved in each district and its percentage to the total area at the disposal of Government:—

Districts.	Maximum area that will eventually be reserved.	Percentage of the area in column 2 to the total area at the disposal of Government.	Percentage of the area already reserved to the total area at the disposal of Government.
1	2	3	4
	SQ. MLS.		
Ganjám	743	21·2	16·4
Vizagapatam	403	35·3	26·6
Gódávari	1,019	44·3	43·5
Kistna	1,185	51·3	50 8
Anantapur	567	21·6	16·8
Bellary	1,089	50·3	25·2
Kurnool	2,677	65·8	48·0
Total ..	7,683	42·4	33·1
Nellore	1,132	45 5	24 1
Cuddapah	2,640	47·6	38 7
Chingleput	281	24·3	20·6
North Arcot	1,226	47·3	41·1
South Arcot	1,059	42·4	33·6
Tanjore	62	8·1	3·1
Trichinopoly	373	41·7	22·9
Salem	1,830	54·4	39·1
Total ..	8,603	44·2	33·3
Madura	651	38 7	38·7
Tinnevelly	493	40·3	33·6
Coimbatore	2,447	71·1	67·6
Nilgiris	(a) 437	69·1	69·1
Malabar	649	15·8	14·7
South Canara	1,424	43·8	34·2
Total ..	6,101	42·6	38·7
Grand Total ..	22,387	43·1	34·7

(a) The area available for further reservation in this district not being known, the area already reserved has been taken to be the maximum area that will eventually be reserved.

In the case of Vizagapatam (non-agency), Gódávari (non-agency), Kurnool, Nellore, Cuddapah, Chingleput and Madura, final estimates of the area of further reservation

have been approved by Government; for the other districts, final schemes are due from the Collectors; and the areas available for further reservation have been based on the very rough estimates furnished by Collectors in 1893 for the purpose of estimating the amount of settlement work still remaining to be done. Further reservations have to be made in all the districts except Madura before the maximum is reached.

In *Gódávari*, the question of further reservation is confined to the Agency tracts of Yellavaram and Pólavaram divisions, concerning which the final orders of Government are awaited. The delay in *Kurnool* is attributed to the difficulty in obtaining efficient surveyors and draughtsmen for surveying and mapping selected blocks and to the inadequacy of the subordinate staff. In *Nellore* progress is said to have been retarded by the absence of karnams on jamabandi duty; but it is hoped that the work will be completed in 1894–95. Some progress was made during the year in *Cuddapah* and *Chingleput* districts, and the Collectors are taking steps to finish the work as soon as possible. In the other districts, selections are being made by Range officers; but the notifications under section 4 have been detained in some cases pending the inspection and approval of the proposed reserves by the District Forest-officers or for the preparation of maps, &c. The want of revenue survey maps operates as a special difficulty in the *Anantapur*, *Salem* and *Trichinopoly* districts. In *South Arcot*, pressure of settlement and final demarcation operations stood in the way of progress in selection. In *Tanjore*, the areas selected by the Revenue officers have been inspected by the District Forest-officer, but it has not yet been decided what areas should be proposed for reservation. In *North Arcot*, the selection is said to be completed in all but two taluks, which are to be taken up shortly.

The areas to be selected for further reservation are very small in the Southern Circle except in the Tinnevelly and South Canara districts. In the *Nilgiris* the question of making further selections without circumscribing extension of cultivation is being investigated by the Collector.

15. *Outturn of work by the Special Forest Settlement-officers.*—The outturn of work by the Special Forest Settlement-officers during the year is shown below:—

ABSTRACT E.—Outturn of work by Special Forest Settlement-officers during 1893–94.

Name of Special Forest Settlement-officer.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost.
		Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	
1	2	3	4	5	6	7	8	9	10	11
			SQ. M.		SQ. M.		SQ. M.		SQ. M.	RS.
Mr. J. T. Levor	Gódávari	..	..	..	..	3	22	..	..	10,215
	Kistna	17	14	22	22	10	16	3	2	
	Kurnool	6	5	15	125	1	2	1	2	
	Total ..	23	19	37	147	14	40	4	4	10,215
Mr. E. A. Smith	Anantapur	14	36	8	21	9	62	19	166	11,258
	Bellary	36	63	10	22	8	21	6	71	
	Nellore	..	..	1	40	4	140	2	24	
	Total ..	50	99	19	83	21	223	27	261	11,258
Mr. W. C. McMurray ..	Cuddapah	8	69	4	86	12	106	17	139	11,108
	North Arcot	25	97	12	53	12	63	12	191	
	South Arcot	45	51	38	71	22	25	7	5	
	Salem	10	21	3	4	4	90	6	39	
	Total ..	88	238	57	214	50	284	42	374	11,108
M.R.Ry. C. Raju Sastri ..	South Arcot	..	..	10	95	7	77	1	7	11,710
	Tanjore	..	..	..	..	..	..	..	..	
	Trichinopoly ..	26	10	13	6	3	2	1	2	
	Madura	19	15	22	63	30	66	31	48	
	Tinnevelly	..	..	..	..	..	..	..	..	
	Coimbatore	7	56	6	54	7	246	6	48	
	Total ..	52	81	50	218	47	391	39	103·2	11,710
	Grand Total ..	213	437	163	662	132	938	112	742·2	44,291
	In 1892–93	253	753	126	691·3	198	1,316	246	2,036	52,849

Judged by the number and area of blocks in which claims were settled as well as of those for which reports were submitted during the year, Messrs McMurray and Raju Sastri have done the largest amount of work; but the conditions vary so much in different districts, and even in different blocks in the same district that no very satisfactory inferences can be drawn from tabulated figures.

16 *Outturn of work by the Revenue Divisional officers entrusted with forest settlement work.*—The subjoined statement shows the settlement work turned out by the Revenue Divisional officers who were entrusted with forest settlement work —

ABSTRACT F—Forest Settlement work done by Revenue Divisional officers

District.	Name of officer	Blocks pending with Forest Settlement officers at the beginning of 1893-94		Added during 1893-94		Total		Disposed of during 1893-94		Blocks pending with the Forest Settlement officers at the end of 1893-94	
		Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
			SQ M		SQ. M		SQ M		SQ M		SQ M
Ganjám ..	Principal Assistant Collector	9	6	.		9	6	1	4	8	2
	Senior Assistant Collector..	17	32	8	7	25	39	..	.	25	39
	General Deputy Collector.	(a) 22	403 (b)+2	2	6	24	411	7	15	24	396
	Total ..	48	443	10	13	58	456	8	19	57	437
Vizagapatam ..	Principal Assistant Collector ..	4	26	.		4	26	1	21	3	5
	Head Assistant Collector ..	12	223		(b)23	12	246	..		12	246
	Total .	16	249	..	23	16	272	1	21	15	251
Gódávari ..	Special Assistant Collector	2	182		..	2	182	(c) 2	182	..	..
Bellary	Deputy Collector, Adóni	6	25	..	..	6	25	1	2	5	23
Chingleput ..	Mr Pinto	61	32	50	27	111	59	44	13	67	46
Nilgiris ..	Head Assistant Collector ..	12	85 (b)+13	8	15	20	113	17	111	3	2
Coimbatore ..	Head Assistant Collector ..	4	8	.	..	4	8		..	4	8
Malabar .	Sub-Collector ..	1	40	1	2	2	42		..	2	42
	Head Assistant Collector ..	.	..	4	..	4		.	.	4	.
	Special Assistant Collector.	14	171	1	..	15	171			15	171
	Deputy Collector, Wynaad	3 (b)+2	160	2	..	7	160	.		7	160
	Total	20	371	8	2	28	373	..	..	28	373
South Canara .	Head Assistant Collector	1	1	33	88	34	89		..	34	89
	General Deputy Collector ..	2	29	1	1	3	30	1	1	2	29
	Total ..	3	30	34	89	37	119	1	1	36	118

(a) The notification of one block was cancelled (b) By rectification
(c) Transferred to Special Forest Settlement-officer

Mr. Pinto in Chingleput and Mr. Cobb, I.C.S., in Nilgiris, were the only Divisional officers who did good work as Forest Settlement officers. Mr. Cobb was the Forest Settlement officer of Nilgiris up to the end of December 1893 and he completed the settlement of almost all the blocks then pending, notably the Sigur reserve which was long pending and in connection with which many tedious claims had to be settled and numerous patta lands acquired. The settlement of this exceptionally difficult and malarious tract of country is reported to have been thoroughly well executed by Mr. Cobb with the assistance of Mr. Morgan, the District Forest-officer.

17. *Reserved lands not brought under settlement.*—The area of reserved lands not yet brought under settlement is shown in Appendix C.

The areas not yet brought under settlement are still considerable in South Canara, Kistna, Salem, North Coimbatore, Cuddapah, Nilgiris and Bellary. In the last two districts, the reserved lands not brought under settlement consist of leased forests which it is not intended to bring under settlement. In the other districts, out of the 338 square miles transferred for settlement during the year, 136 square miles were from areas of reserved lands constituted in previous years as shown in the margin. The progress in *South Canara* is satisfactory. In *Kistna*, the time of the District Forest-officer and his subordinates was mainly taken up during the year with the elaboration of a scheme for regulating the grazing in reserved areas which has just received the approval of Government. In *Salem*, the delay is attributed to the fact that the boundaries of the reserved lands require to be added to or altered before they can be notified for settlement In the case of *North Coimbatore* a large extent of cultivable lands in the Erode taluk, which had been retained as reserved lands for a long time pending the consideration of their fitness to be constituted reserved forests, was upon the Collector's report ordered to be set free for cultivation subsequent to the close of the year.. No explanation is given for the want of progress in *Cuddapah*.

	Transferred for settlement during 1893-94	Area constituted reserved land in previous years
South Canara	87	87
Kistna ...	36	2
Salem	35	9
North Coimbatore ...	37	37
Cuddapah	81	1
Nilgiris	15	
Bellary ...	47	

18. *Demarcation.*—The following statement shows the length of boundary lines preliminarily and permanently demarcated up to and during the year under report, and the total and average cost of the work —

Abstract G.—Demarcation work done during 1893–94.

	Preliminary.							Permanent.							Reclearing old lines, &c.					
	Up to 1893–94.		During 1893–94.			Total.		Up to 1893–94		During 1893–94.			Total.		Up to 1893–94.		During 1893–94.		Total.	
	Miles.	Cost.	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Miles.	Cost.	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Miles.	Cost.	Miles.	Cost.	Miles.	Cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Northern Circle.		Rs.		Rs.	Rs. A. P.		Rs.		Rs.		Rs.	Rs. A. P.		Rs.		Rs.		Rs.		Rs.
Ganjám	36	146	..	..	..	36	146	930	13,547	82	1,102	13 7 0	1,012	14,649	210	511	152	350	362	861
Vizagapatam ..	107	134	11	18	1 10 2	118	152	101	803	75	1,693	22 9 2	176	2,496	63	614	..	..	63	614
Gódávari	560	3,055	24	194	8 1 4	584	3,249	690	8,111	14	60	4 4 7	704	8,171	..	..	..	..	..	..
Kistna	209	1,651	320	1,042	3 4 1	529	2,693	557	10,779	8	62	7 12 0	565	10,841	..	1,139	..	784	..	1,923
															..	(i) 2,967	..	(i) 58	..	(i) 3,025
Anantapur ..	(b) 35	140	231	10	0 0 8	266	150	670	10,895	55	933	16 15 5	725	11,828	190	930	..	20	190	950
Bellary	(j) 62	36	373	675	1 12 11	435	711	(j) 134	1,160	145	703	4 13 7	279	1,863	22	142	.	..	22	142
Kurnool	982	k) 14,159	515	1,103	2 2 3	1,497	15,262	14	160	25	1,073	42 14 9	39	1,233	..	..	..	..	..	..
Total ..	1,991	19,321	1,474	3,042	2 1 0	3,465	22,363	3,096	45,455	404	5,626	13 14 10	3,500	51,081	485	6,303	152	1,212	637	7,515
Central Circle.																				
Nellore	252	1,081	..	..	..	252	1,081	589	6,522	84	510	6 1 2	973	7,032	433	987	3	9	436	996
																		(i) + 48		(i) + 48
Cuddapah	(b) 69	84	360	687	1 14 6	429	771	1,367	26,649	144	1,499	10 6 7	1,511	28,148	16	39	10	340	26	379
																		(a) 121		(a) 121
Chingleput ..	(b) 110	682	249	1,006	4 0 8	359	1,688	486	12,078	76	853	11 3 7	562	12,931	8	1,072	..	574	8	1,646
																		(a) 409		(a) 409
North Arcot ..	(b) 430	4,184	..	..	..	430	4,184	1,535	23,815	458	5,250	11 7 5	1,993	29,065	138	1,077	212	716	350	1,793
South Arcot ..	850	1,991	94	246	2 9 10	944	2,237	519	3,394	383	4,911	12 14 5	902	8,335	103	319	..	..	103	319
																		(a) 1,442		(a) 1,442
Tanjore	323	211	7	10	1 6 10	330	221	38	408	..	..	..	38	408	..	..	..	..	..	..
Trichinopoly ..	473	2,392	224	550	2 7 3	697	2,942	214	2,069	7	88	12 9 2	221	2,157	..	..	..	(a) 345	..	(a) 345
Salem	(b) 664	588	489	1,002	2 0 9	1,153	1,590	2,069	21,541	432	2,196	5 1 4	2,501	23,737	203	327	590	1,288	793	1,615
Total ..	3,171	11,213	1,423	3,501	2 7 4	4,594	14,714	7,117	96,476	1,584	15,337	9 10 11	8,701	1,11,813	901	3,821	815	5,292	1,716	9,113
Southern Circle.																				
Madura	(b) ..	..	..	..	..	..	..	(f) 848	(f) 16,091	..	..	..	848	16,091	575	8,578	340	1,370	915	9,948
Tinnevelly ..	17	624	180	255	1 6 8	197	879	(k) 210	(f) 6,943	94	1,197	12 11 9	304	8,140	978	6,939	44	367	1,022	7,306
North Coimbatore.	785	7,060	46	586	12 11 9	831	7,646	(f) 303	3,013	83	1,451	17 7 8	386	4,464	121	1,631	117	849	238	2,480
																		(a) 539		(a) 539
South Coimbatore..	(b) 15	85	41	368	8 15 7	56	453	417	9,142	65	747	11 7 10	482	9,889	223	1,300	72	493	295	1,793
Nilgiris	(b) ..	..	59	421	7 2 2	59	421	957	23,552	9	126	14 0 0	966	23,678	79	528	157	2,203	236	2,731
North Malabar ..	(b) 39	179	(d) —18	(d)—76	..	21	103	296	4,349	(e) 76	(e) 1,031	13 9 1	372	5,380	..	(f) ..	..	(a) 452	..	(a) 452
																		(e) 183		(e) 183
South Malabar ..	(f) 54	(g) 180	47	250	5 6 1	101	430	(f) 67	(g) 805	17	(h) 107	6 4 8	84	912	(g) 6	(g) 25	10	143	16	143
																		33		58
South Canara ..	(b) 1,281	1,029	230	154	0 10 9	1,511	1,183	230	4,279	23	394	17 2 1	253	4,673	..	..	..	348	..	348
Total ..	2,191	9,157	585	1,958	3 5 7	2,776	11,115	3,328	61,174	367	5,053	13 12 3	3,695	73,227	1,982	19,001	740	6,980	2,722	25,981
Grand Total ..	7,353	39,691	3,482	8,501	2 7 1	10,835	48,200	13,541	2,10,105	2,355	26,016	11 0 9	15,896	2,36,121	3,368	29,125	1,707	13,484	5,075	42,609

(a) This represents the cost of establishment, &c. (b) In spite of instructions the Collector has not explained the difference between the total amount entered here and that in Form No. 64 against VIII (a). (c) Cost of sign boards. (d) Having been permanently demarcated the length and cost have been transferred to that heading: (e) Includes 18 miles and its cost Rs. 76 transferred from preliminary demarcation heading. (f) The Collector reports that the cost incurred up to 1893-94 had been included in the sum under permanent demarcation. (g) Cost of reclearing was included under this head. This has been separated and shown under its proper head. (h) Includes Rs. 26 being the pay and allowance of a temporary Forester employed for one month. (i) Cost of erecting stone posts. (j) Differences between the closing balances of 1892–93 and the opening balances of 1893–94 have not been explained by the Collectors. (k) Correct figures as now reported by the Collector.

19. *Preliminary demarcation.*—The outturn of work under this head during the year was *nil* in Ganjám, Madura, North Arcot and Nellore. Further reservation of forests in the first named district awaits the decision of Government on the question of the conservancy of the agency forests. In *Madura* reservation having reached the maximum area available, there was no work under this head. In *North Arcot* it is said that all new selections are permanently demarcated at the outset with stone slabs, as no alterations of boundaries are expected to be made at settlement, and even should any be decided on, the cost of shifting the slabs will be comparatively very light. In *Nellore* some temporary marks were put up with the aid of Forest guards for the blocks selected and notified under section 4. It is reported that arrangements have since been made to demarcate them temporarily by a cleared line; hence the outturn of work during the year under review is shown as *nil*. The small outturn in *Vizagapatam* and *Gódávari* is due to the same reason as that assigned for absence of work in Ganjám. In *Coimbatore* and *Malabar*, the area demarcated is commensurate with the area selected. The adoption of Revenue Survey stones as boundary lines of new selections in *Tanjore* accounts for the small quantity of work done in that district. The short outturn in *South Arcot* is due to more attention having been paid to permanent demarcation and settlement; and that in *Nilgiris* was attributable to the fact that the question of making further selections without affecting extension of cultivation was under consideration.

Compared with the average cost of preliminary demarcation during 1892–93, the cost per mile during the year under review is small in Anantapur and Tinnevelly. In *Anantapur* this result is due to the preliminary demarcation work having been done by the existing establishments; and in *Tinnevelly* it is due to the adoption of the Revenue Survey field stones as pillars for preliminary demarcation, as also to the replacement of missing stones at the expense of the Revenue Department and of the owners of adjoining patta lands.

20. *Permanent demarcation.*—The outturn of work during the year under review has been very small in Gódávari, Kistna, Trichinopoly, Nilgiris and South Malabar. In *Gódávari* it was owing to the exclusion of Forest officers from the agency tracts; and in *Kistna* to more time having been devoted to preliminary demarcation. No explanation has been furnished for the short work in *Trichinopoly* but it is also probably due to more attention having been paid to preliminary demarcation. In *Nilgiris* the reserves in former years were demarcated permanently, as selected, with posts and mounds which have not stood the test of wear and tear, but which are being replaced by substantial stone cairns. 157 miles were thus redemarcated and this accounts for the small outturn (9 miles) of new work. In *South Malabar* the short work is due to the fact of there being no more reserves to be finally demarcated.

The cost rate of permanent demarcation during the year compared with that in 1892–93 is high in Vizagapatam, South Arcot, Kurnool, North Coimbatore and Ganjám, and small in Cuddapah, North Arcot, South Coimbatore, Nilgiris and North Malabar. The high rate in *Vizagapatam* and *South Arcot* was due to the system of uprooting stumps in the lines cleared and to the adoption of a more substantial method of demarcation than that pursued in former years; and in *Kurnool* to the erection of boundary cairns with solid stone in chunam in lieu of loose stone cairns. In *North Coimbatore* the increase is attributed to the difficulty experienced in procuring labour on the hills for demarcating the Nilgiri eastern slopes. No explanation has been furnished for the increase in *Ganjam*. The decrease in *Cuddapah* and *North Arcot* is accounted for by the fact that no demarcation with stone walls was done in the former district, and that in most cases very little had to be cleared in the latter. The small average in *Nilgiris*, *South Coimbatore* and *North Malabar* is attributable to the fact that, unlike the practice in former years, the cost of renewals of old pillars and cutting of trenches in the first named district, and the widening and reclearing of old lines in the last two districts, was not included in the item of permanent demarcation during the year under review.

21. The total expenditure incurred during the year on both kinds of demarcation including the reclearing of old lines amounted to Rs. 48,001 against Rs. 49,571 as per audited accounts (F No. 64). The variation is due to differences in certain districts which have not been explained by Collectors.

In future reports Collectors are requested to furnish information regarding the character of the permanent demarcation adopted and the Conservators to offer their opinion as to whether it is commensurate with the requirements of the department.

CHAPTER III.

SURVEYS AND WORKING PLANS.

22. The Survey of India Party was engaged during the year chiefly in the Salem and North Arcot districts; but certain reserves in the Palni Hills in Madura were also surveyed. In the *Salem* district, the area surveyed includes a number of detached reserves in the Salem taluk and a large block of forest on the Chitteri and Kalráyan Hills in the Uttankarai taluk. In the *North Arcot* district, the work lay in the Palmanér and Gudiyáttam taluks, and consisted in the survey of forests on the slopes of the Mysore plateau and of a few outlying reserves. In the *Madura* district, only six square miles of sholas in the Palnis which had been taken up subsequent to the withdrawal of the Party from the district in the preceding year were surveyed.

In addition to this, triangulation was extended through the Hosúr, Dharmapuri, and Krishnagiri taluks of the *Salem* district and the Gudiyáttam and Palmanér taluks of *North Arcot*. A considerable length of boundary traversing was also carried out Some of this in North Arcot was wasted work, owing, it is said, to faulty demarcation. The corrected boundaries are to be resurveyed in the current year.

The topography was drawn on 62 sheets, of which 24 were held back, five for additions, seven pending settlement and twelve (in *North Arcot*) for resurvey of boundaries; the remaining 38 sheets are in process of publication, and it is hoped that the twelve sheets relating to the *North Arcot* District will be sent for publication in the current field season.

The following table shows the outturn during the year in each district:—

Districts		Triangulation	Traversing	Topography
		SQ MLS	LINEAR MLS	SQ MLS
Madura		.	..	6
Salem		1,600	2,132	464
North Arcot		400	3,024	411
Total	1893-94	2,000	5,156	881
	1892-93	3,430	139	788

The outturn of topography is the highest on record; and the cost rate is the lowest. These results are attributed chiefly to the increase in the effective strength of the Party.

Year	Topography completed	Cost rate per square mile
	SQ MLS	RS
1888-89	168	162
1889-90	214	149
1890-91	465	112
1891-92	659	97
1892-93	788	78
1893-94	881	74
Total	3,175	

The total expenditure, including cost of instruments, was Rs. 82,559 for the financial and Rs. 78,549 for the survey year ending with 31st August 1894. Excluding the contribution payable by the Government of India, the cost for the financial year as adjusted by the Accountant-General in the forest accounts of this Presidency amounted to Rs. 63,092.

Maps have not yet been published for 363 square miles, out of the total area surveyed, as specified below:—

	Area SQ. MLS.
(1) Four sheets of the Kalráyan hills in Salem, of which the survey is not yet completed	78
(2) No 80 Kalladipatti in Salem, boundary not notified as yet	10
(3) Forests in North Arcot, above referred to, of which the boundaries have to be rectified	275
Total ...	363

23. The Board has recently submitted to Government a report on the work turned out by the temporary staff of surveyors and draughtsmen employed in the department during the last official year. The following summary is extracted therefrom :—

Circle	Work done in 1893-94		Work remaining to be done	
	By surveyors	By draughtsmen.	By surveyors	By draughtsmen.
1	2	3	4	5
Northern				
Eight surveyors and seven draughtsmen	Fifty-four reserves surveyed, maps for several reserves and tracings from taluk maps prepared, reserves marked in the taluk maps	One hundred and two new sketch-maps prepared, several reserve maps copied, reserves in the district and taluk maps, &c, posted	Several new reserves to be surveyed and mapped, and the unsurveyed patta lands included in certain blocks to be surveyed	Maps for 91 blocks to be prepared Two copies of each reserve map to be made for range officers, &c., position of reserves to be posted in district and taluk maps and alterations made at settlement to be carried out
Central.				
Three surveyors and eight draughtsmen	Fourteen reserves surveyed and a few sketch-maps prepared	Six hundred and twenty-nine new maps prepared, several reserve maps copied and checked, reserves in the district and taluk maps posted, alterations made at settlement attended to	Nineteen reserves to be surveyed	Five hundred and sixty-three blocks to be mapped, several reserve maps to be copied, position of reserves to be posted in the district and taluk maps
Southern.				
Five surveyors and six draughtsmen.	Several new reserves surveyed, a few new maps and several tracings prepared, and areas computed, certain reserves, &c, demarcated	Areas computed sketch-maps and tracings, &c, for 124 blocks prepared, several reserve maps checked, 28 sketches copied, reserves in district and taluk maps posted	Three hundred and thirteen blocks to be demarcated, maps for several proposed reserves to be prepared after survey of boundaries	Ninety-two tracings to be prepared, 26 maps to be corrected, several range and district maps to be prepared, position of reserves to be posted in district and taluk maps

The work done has been mainly in connection with the selection and settlement of reserves. The Conservators do not report very favorably on the progress made. In the Northern Circle satisfactory work was turned out in Kistna and Ganjám. In *Vizagapatam* one man was found incompetent and was allowed to resign while his successor was unable to stand the climate. In *Bellary*, *Kurnool* and *Anantapur* the men employed were found to be inefficient and had to be replaced several times.

In the Central Circle the work was chiefly confined to the Salem district, but progress was retarded by the incompetence of the men and the unhealthiness of the localities in which they had to work.

In the Southern Circle the survey work in *South Canara* did not progress as fast as it should have done owing to the fact that isolated blocks were surveyed and time was lost in travelling from one block to another. In *South Malabar* the work was delayed owing to excessive rain and want of competent surveyors, the only surveyor who was employed fell ill before he could clear 17 miles of boundary. In *Tinnevelly*, the surveyor was employed in demarcating new blocks selected for reservation. No survey work was done in other districts.

24. In the report for the previous year it was stated that arrangements had been made with the Superintendent, Madras Survey, to have foresters trained in survey work. Under this arrangement only one forester in the Salem district was deputed during the year for the purpose of undergoing the special training. The department being undermanned, it is not possible to give effect to the order, pending the augmentation of the subordinate establishment.

25. The preparation of maps for submission to Government with draft notifications under section 4 for proposed reserves is at present regulated by the following rules :—

(1) In surveyed tracts where maps are available, the District Forest-officer has only to mark the approximate limits of the proposed blocks on these maps and get the reserve map prepared therefrom under his orders.

(2) If the District Forest-officer is unable to have the reserve map thus prepared, he is to send a tracing of the taluk map to the Survey office.

(3) Even in tracts for which village maps are not available, if the District Forest-officer can himself get the area surveyed and the map accurately and expeditiously prepared, he is to adopt this course in preference to obtaining the map from the Survey office.

(4) Where a tracing has to be sent to the Survey office, the map is to be prepared in that office by fitting together cuttings from the village maps if they exist, or by enlarging the taluk maps to the required scale. The District Forest-officer will then have the temporary forest boundary marks entered on the map as accurately as he can to prepare for final settlement. He can also send the map back to the Survey office for verification if necessary.

(5) In unsurveyed tracts where it is difficult to get the boundaries surveyed accurately, the blocks can be extended, when expedient, under the present policy of Government in regard to forest reservation, up to surveyed limits, and the boundaries of the reserve as originally proposed can be shown approximately on the maps.

Alterations that may be found necessary in the course of settlement, are made with the assistance of the Forest Settlement-officer.

The maps thus corrected are submitted to Government with the draft final notification under section 16.

26. The final maps are prepared in the following manner:—

If the area of the reserve does not exceed 10 square miles, the District Forest-officer gets any interior details not already shown entered in a clean copy of the map, and when this has been done, the map together with the records of the measurement of all changes made during settlement is sent to the Survey office for the preparation of the final map. If the area of the reserve exceeds 10 square miles, the missing interior details need not be filled in by the District Forest-officer; but the map showing the boundary with the records of measurement is sent through the Conservator to the Superintendent, Survey of India Party; but if there should be reason to consider that the final map can be completed departmentally with sufficient accuracy, reference should be made to the Conservator, and if necessary to the Board, for orders. In this connection attention is invited to the correspondence ending with the Government of India letter to the local Government, dated 28th December 1893, No. 1327-F.

The area of reserved forests for which final maps have been prepared for each district up to 30th June 1894, is shown in the statement appended to this report—*vide* Appendix D.

The area of reserved forests for which final maps had not been prepared up to 30th June 1894 was 2,843 square miles.

27. During the year under report, instructions were issued for the maintenance of a uniform set of maps of the following description in the District and Range offices:—

(1) A district forest reference map, being the office reference maps on 4 miles to the inch scale published by the Survey office, posted up with all reserves, roads, buildings, forest stations, range divisions, &c.

(2) A range forest reference map, being the 1 inch to the mile topographical map of the Survey office, posted up as in the case of the district reference map, but in more exact detail, and showing names of hills and streams, minor forest stations, &c.

(3) Separate maps for each reserve with topographical features usually on the 8 inches to the mile scale, or any other scale that may be found suitable and showing all enclosures, rights of way, forest roads and stations, compartment lines, &c. These would be prepared by enlargements from the Range maps or reductions from village maps or furnished by the Survey of India Party.

(4) Separate working circle maps usually on the 8 inches to the mile scale, or on such other scale as may be required in each case.

Each District Forest-officer has been ordered to have a set of all the above maps mounted in book form; and each Range officer to have one copy of Nos. 2, 3, and 4 mounted in book form and also one additional copy of Nos. 3 and 4 mounted in scroll form for computing areas, &c.

Marginal references are to be given on all the maps, showing the scale, areas, names of roads and buildings and stations; and as regards reserves, their number, name, area, outline, when declared reserved, when permanently demarcated, when surveyed, &c.

28. *Working Plans.*—Not much was done towards the formation of regular working plans, but system is being introduced in several districts so far as is possible with the limited establishments and with settlement work still unfinished. Statistics of demand and supply for each reserve separately are being collected in all the districts for future working plans.

Northern Circle.

Ganjám.—A record was made of the measurements of Sal trees on various selected $\frac{1}{4}$ acre plots.

Vizagapatam.—A few experiments were made to find out the yield per acre of the Golgonda ordinary forest, and a rough working plan was made out for working the Golgonda ordinary (not Agency) forests with a view to the eventual supply of fuel to the Railway.

Gódávari.—No new working plans were framed; but some reserves were closed against cutting pending the formation of working plans, and some statistics were collected.

Kistna.—In *Kistna* some pains have been taken by the District Forest-officer to introduce some system. A working plan is in force for the Babul (*Acacia arabica*) reserves in Guntúr taluk. With the exception of five or six standards per acre, the yield in coupe 1 gave an average of six tons an acre of large wood and two tons of small wood, besides 100 yoke loads of thorns. Coupe 2 gave 5·2 tons of large wood, 1·3 of small wood and twenty yoke loads of thorns.

The mangrove forests were treated more systematically in Bandur and Bápatla ranges. The seven reserves were divided into three blocks. A definite working plan cannot be made at present for want of maps, for want of reliable statistics of growth, and because the sea is encroaching in one and receding in the other tract; but information is being systematically collected. Some attempt was also made to introduce system in the treatment of the Yepi (*Hardwickia binata*) forests of Palnad and Vinukonda. This species of tree has been recklessly pollarded in former years chiefly for fodder and fibre. The chief aim of the District Forest officer was to discover the demand for the wood of this species and of *Anogeissus* and *Chloroxylon* as the chief associated trees, all other species being classed as miscellaneous.

It was anticipated, and found to be the case in practice, that the demand would be chiefly for the better class of trees. The largest demand was for Hardwickia, but as these trees are for the most part pollarded it is better that they should give place to seedlings or coppice.

A demand may spring up for the other species, and the experiment may well be persevered in.

In Vinukonda range, Bollapalli reserve and Bollapalli extension were formed into a working circle, divided into twelve compartments. The demand here was very small because of the cheap rates in Agraharam forests, the absence of timber dealers, and because the Hardwickia was smaller than in the other block.

Bellary.—Mr. Hooper's working plan for the Sandúr leased forests was sanctioned by Government, but work was not commenced during the year because the sanction arrived too late.

Central Circle.

Nellore.—The plan for the Sriharikóta forest was somewhat modified owing to difficulties of transport. Work in the second khandam has been spread over three years, the yield this year being 2,748 tons.

The difficulties of transport have been provided against by an addition of $1\frac{1}{4}$ miles of tramway received from North Arcot, and by the introduction of the system of selling wood on the spot, instead of transporting it to Madras.

The working plans for the casuarina plantations had to be modified owing to the large number of dead trees, of which nearly 25,000 were cut during the year yielding nearly 1,100 tons. These casualties are on the increase.

Cuddapah.—There were no new working plans and the Balapalli working plan had to be modified owing to the absence of demand till the latter end of the year.

North Arcot.—In this district seven coupes were worked departmentally in various reserves, and seventeen coupes were sold to contractors in accordance with provisional working plans. It was found that the net profit per acre on the former was Rs. 2-3-1 and from the latter Rs. 2-5-6. The reason for the lower profit by departmental agency was that the work was done more carefully.

The average yield per acre for the 1,569 acres cut departmentally was 4·17 tons, besides a yield of 3,357 posts and logs fit for agricultural implements.

South Arcot.—The working plan for Annamalai reserved forest was passed and acted on during the year.

A working plan was made out for the casuarina plantations of Talankoda, Fort St. David and Shonankuppam.

Data have been collected for a working plan for the casuarina plantation of Doni Durai (North and South), Nochikadu and Periakuppam. Completion of the plan is delayed pending settlement of part of the proposed working circle.

A considerable number of coupes have been opened under preliminary working plans, but out of 23 marked out in various reserves, twelve were not sold during the year owing to slackness in demand.

Trichinopoly.—The only forests worked under a regular working plan are the Padugai plantations (casuarina) on the south bank of the Cauvery. The yield was half as much again as the estimate; but it is hard to compare results at present as the plan was made for the official year, and results are for the forest year.

Salem.—The working plan in force for the Morur block had to be deviated from during the year, for want of demand. There is, however, now a favourable demand from the Railway.

Although no definite working plans were framed during the year, coupes were opened in several reserves on a fixed principle, and statistics are being collected for future working both departmentally and by contractors.

Southern Circle.

Tinnevelly.—No definite working plans have been completed, but the forests of this district have long been worked on a sort of system, coupes being opened and worked sometimes departmentally, sometimes through contractors.

North Coimbatore.—No regular working plans were formed, but a commencement was made towards some system by the District Forest-officer, who issued detailed instructions for the restriction of felling under permit to definite localities. Two coupes were marked out near each of the towns of Kollegal, Satyamangalam and Bhaváni.

South Coimbatore.—No new working plans have been made out; but some progress has been made towards a small working plan for block I of Chinnar (575 acres); and another for a portion of Odanthorai in the Méttupálaiyam range.

Nilgiris.—The only fresh step towards the formation of new working plans reported during the year was the survey, by a forester, of the Kallia, Little Kallia and Newman plantations.

Work was carried on in accordance with the working plans made out by Mr. Gamble for the other plantations, but considerable revision of these is now required, because in the first place the period for which some were drawn out has elapsed, and in the second place because there is not sufficient demand for the wood. There are a large number of private plantations on the Nilgiris, and the competition has reduced the value of firewood almost below the cost of production. It seems advisable to alter the system of pure coppice to one of coppice under-standard, or even to convert many of the reserves now under coppice to high forest.

South Malabar.—Work was carried on in Nilambúr in accordance with the working plan; but this was found to require revision. The estimated number of trees were not obtained from the thinnings. During the next year it will be necessary to remove many dead and dying trees even from areas not marked for treatment in the working plan. A fresh valuation survey is in progress, and a renumbering of the standing stock in the old plantations.

The Wálayár reserve was worked in accordance with the working plan.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(a) *Establishment, Ranges and Beats.*

29. *Establishment.*—The establishment for two years in each circle is shown below:—

	Northern Circle.			Central Circle.			Southern Circle.			Total.		
	1892-93.	1893-94.	Difference.	1892-93.	1893-94.	Difference.	1892-93.	1893-94.	Difference.	1892-93.	1893-94.	Difference.
Permanent.												
Controlling staff—												
Conservators	1	1	..	1	1	..	1	1	..	3	3	..
Deputy Conservators	5	4	— 1	6	6	..	6	5	— 1	17	15	— 2
Assistant Conservators	3	1	— 2	2	3	+ 1	3	4	+ 1	8	8	..
Extra Assistants including three Sub-Assistants	4	4	..	5	3	— 2	4	4	..	13	11	— 2
Subordinate staff—												
Forest rangers	15	17	+ 2	22	22	..	20	19	— 1	57	58	+ 1
Foresters	31	29	— 2	48	45	— 3	48	52	+ 4	127	126	— 1
Forest guards	222	213	— 9	299	297	— 2	210	210	..	731	720	—11
Office establishment—												
Clerks	18	19	+ 1	42	37	— 5	45	44	— 1	105	100	— 5
Peons, &c.	66	70	+ 4	70	52	—18	63	61	— 2	199	183	—16
Total ..	365	358	— 7	495	466	—29	400	400	..	1,260	1,224	—36
Temporary.												
Rangers	..	1	+ 1	..	..	..	..	..	..	..	1	+ 1
Surveyors	7	5	— 2	4	4	..	5	3	— 2	16	12	— 4
Draughtsmen	7	7	..	6	5	— 1	4	5	+ 1	17	17	..
Foresters	1	1	..	15	12	— 3	..	4	+ 4	16	17	+ 1
Overseers	..	1	+ 1	1	1	..	..	..	..	1	2	+ 1
Supervisors	..	13	+13	4	12	+ 8	15	15	..	19	40	+21
Depôt-keepers	3	3	..	11	5	— 6	11	10	— 1	25	18	— 7
Clerks	7	9	+ 2	14	11	— 3	7	15	+ 8	28	35	+ 7
Permit-keepers	36	23	—13	17	11	— 6	10	3	— 7	63	37	—26
Guards	25	34	+ 9	..	17	+17	..	..	..	25	51	+26
Peons	34	47	+13	6	9	+ 3	10	14	+ 4	50	70	+20
Mahouts	6	2	— 4	..	..	..	64	79	+15	70	81	+11
Tannahdars	189	137	—52	217	148	—69	183	262	+79	589	547	—42
Maistries	..	..	..	12	6	— 6	4	8	+ 4	16	14	— 2
Gardeners	62	61	— 1	61	30	—31	22	17	— 5	145	108	—37
Lascars	6	8	+ 2	20	..	—20	8	8	..	34	16	—18
Watchers	122	137	+15	715	770	+55	207	211	+ 4	1,044	1,118	+74
Boat syrang	1	1	..	1	2	+ 1	1	1	..	3	4	+ 1
Total ..	506	490	—16	1,101	1,043	—61	551	655	+104	2,161	2,188	+27

The figures given above represent the number of officers and subordinates actually on duty on the last day of each of the two years in question. The decrease in the permanent establishment is due to the absence of a larger number of officers on leave, or for other causes as the sanctioned scale remained unaltered during the year under report. In the temporary establishment there were various changes in the numbers in the classes of subordinates, but an increase in the total number of 27 hands.

From almost every district there is a cry for larger establishments, more especially in the subordinate grades. The promotion is very slow and there is a feeling of hopelessness which is not conducive to efficiency. Many Dehra Dun passed Rangers have no prospects at present.

(b) *General protection and breaches of Forest laws.*

30. The statement in Appendix E shows the number of forest offences reported and the particulars of their disposal.

31. The actual decrease in the number of new cases reported this year as compared with the new cases in last report was 898; but a period of 15 months was dealt with in that report. As it is not possible to state what proportion the cases for the extra three months might be presumed to bear to the rest of the period, the remarks on increase or decrease will be made with reference to the actual figures as they stand. In the number of new cases as compared with the new cases in last report there are noticeable fluctuations in some districts. The form in the margin gives the figures.

Years.	No.
1892–93	10,905
1893–94	10,007

	Increase.		Decrease
Kistna	25	Ganjám .	41
Anantapur ...	46	Vizagapatam .	519
Nellore ...	15	Gódávari ...	525
North Arcot ..	171	Bellary . .	166
South Arcot	193	Kurnool .	92
Tinnevelly ...	193	Cuddapah	169
South Malabar .	2	Chingleput ..	95
South Canara .	844	Tanjore ...	13
		Trichinopoly...	341
		Salem ...	199
		Madura .	32
		North Coimbatore.	28
		South Coimbatore.	100
		Nilgiris ...	60
		North Malabar	7

For the increase, that in *Kistna* is due to a large increase in the number of grazing cases, mostly of a petty nature, due to increased attention to enforcing rules. The returns for the previous year were defective in *Anantapur*, but there is an increase which is accounted for by increased vigilance, the increase in *Nellore* is attributed to the same cause. The considerable increase in *North Arcot* is due to more general detection, and that in *South Arcot* chiefly to more particular attention being paid to grazing; the result being that the revenue rose from about Rs. 8,000 to Rs 15,000. The nominal nature of protection against illicit grazing has been complained of in former reports. In *Tinnevelly* there is an anomaly in the returns which makes comparison difficult, namely, that all offences which are reported are entered in the register, whether any offenders are discovered or not. This is an unnecessary innovation. In *South Canara* the increase is very large and is reported to be due to an increase of establishment. A guard is now associated with a watcher and the two go on the beat in company. In many reserves there are special watchers and thus for portions of a beat there are sometimes three men. This system wants watching, for arguments on both sides are obvious.

For the decrease, that in *Ganjám* was normal; that in *Vizagapatam* was large, two causes accounting for it: in the first place the returns last year were abnormally high owing to the late resumption by the Government of Palkonda taluk; and in the second place the office was so weak that the District Forest-officer could not exercise due supervision during part of the year, and the Palkonda ranger became thoroughly inefficient through ill health. The decrease in *Gódávari* was due largely to the absence of driftwood cases, as the Forest Department was excluded for some time during the year from the Agency tracts; the number of new cases generally however is very low and is attributed to the same cause. The decrease in *Bellary* is slightly larger than can be accounted for by the shorter time under report, and is to be attributed to want of establishment. The decrease in *Kurnool* is normal; that in *Cuddapah* is slightly in excess of normal, but is not explained. There is not much to remark on about *Chingleput*, *Tanjore*, or even *Salem*, comparing the two periods. In *Trichinopoly* the numbers were probably rather high in the previous year in comparison with other districts; however the District Forest-officer is of opinion that a large number of cases, chiefly of goat grazing, still go unreported; in *Madura* the returns are defective, and detection seems low for the area of the district; better establishment is required; in *North Coimbatore* the forests are too large and scattered for the small establishment to protect them properly; in *South Combatore* protection is easier, but as the forests are in compact blocks petty cases are not so frequent as in some districts; in the *Nilgiris* the decrease is normal.

A remark on the small number of cases in *North* and *South Malabar* was made in the previous year's report and an explanation called for. The explanation is that in both districts the greater part of the land is private, Government forest is contracted into comparatively small and compact limits, and there is a vast amount of forest land outside the Government limits. In *South Malabar* no applications were made for grazing permits, and all the reserves might be closed if necessary; in *North Malabar*, Wynaad, the cases most to be feared are major cases of timber theft by Mysore people, and there is an absence of the petty cases of grazing and minor thefts

of wood which go to swell the number of offences in many districts. It is possible that the large number of cases in *South Canara* may be accounted for partly by the opposite reason, that the forests are much more intermixed with private lands.

32. Of the cases pending at the end of the two periods under comparison, there is a decrease of 345 for the year under report. In *Ganjám* there is a considerable decrease, but this is partly due to the withdrawal of some forty-four old pending cases. In *Gódávari*, a large number of driftwood cases were pending with the Magistrates at the end of 1892–93; during the year under report there were no such cases. The number pending in *Kistna* shows a considerable diminution, but is still high—279. The decrease in *Cuddapah* is satisfactory and most of the cases pending are petty cases in process of being compounded. The large number pending in *South Arcot* (207) comprises 149 with the District Forest-officer, the balance are with Magistrates; those with the District Forest-officer are said to be well in hand. In *South Canara* there is no explanation of the large number pending (418), but this number is not relatively very excessive.

33. The percentage of cases withdrawn to cases disposed of is high in *Ganjám* (16), but these were chiefly long pending cases of no great importance. In *Kistna* 10 per cent. were withdrawn, being either long delayed cases or cases brought against cattle owners in ignorance of the High Court ruling that owners were not criminally liable if cattle strayed during their absence. The percentage of cases withdrawn in *Chingleput* was 14, for want of sufficient proof; the percentage of 16 in *South Arcot* is less than that of last year, but is still high. In *Tanjore* the very high percentage of withdrawals (24) is due to the fact that a weak establishment had been sending up ill proved cases and the District Forest-officer withdrew all doubtful ones; in *Tinnevelly* the number of withdrawals is misleading—it is put down at 23 per cent., but includes numerous cases of offences reported where no offenders were discovered; in *South Coimbatore* and the *Nilgiris* the percentages of withdrawals were due to faulty charges.

34. Of the cases compounded the percentage for the Presidency compared with the cases disposed of was 51 against 39 in the previous year. There was a considerable increase in Vizagapatam, Kistna, Kurnool, Cuddapah, South Arcot, Tinnevelly, South Malabar and South Canara. The percentage was very high in *South Malabar* (75), but there were only three cases compounded; in the majority of these cases the greatest care was taken to sift the evidence, and only cases which were considered proved were compounded. The power of compounding was retained in all cases by the District Forest officer and never delegated to subordinates. Generally the cases compounded were trivial and in most cases the offenders much preferred to compound. In many districts the law is so well-known that the offer of compounding is refused if the offender thinks the case sufficiently doubtful.

There were a few cases of high compounding rates, but the average for the Presidency was only Rs. 7–1 per case or Rs. 3–1 per person accused. The average per person accused was Rs. 3–15 in *North Malabar* a big timber district, Rs. 5–6 in *Kurnool* Rs. 4–4 in *North Arcot*, Rs. 3–2 in *South Arcot* and a less amount in most of the others.

35. The percentage of acquittals was almost the same as last year (22). The percentage increased in Ganjám, Vizagapatam, Gódávari, Anantapur, South Arcot, Salem, South Coimbatore and South Canara; and decreased in the other districts, particularly North Malabar, Madura (16 against 55), Trichinopoly, North Arcot, Nellore and Kurnool. The very high percentage in *Ganjám* was in long pending cases. It is said that the magistracy is now dealing promptly with forest cases. Considerable care is shown in most districts now in dealing with offence registers, but they are not yet quite reliable. In *Kurnool*, for instance, till the beginning of the year under report the registers dealt only with cases compounded, but this is now remedied; in *Tinnevelly*, as above mentioned, some offences were registered though the offenders were not detected; in *Madura* the returns are admitted to be defective. Care is necessary to have all registers fully written up on the same principle, and the question is under report. As regards the nature of offences, the majority are either for petty thefts of wood or cattle-trespass. There were a large number of cattle trespass cases in Kistna, North Arcot, South Arcot, Trichinopoly, Salem, and a moderately large amount in Tinnevelly, North and South Coimbatore; but it is almost inevitable when serious efforts are taken to carry out rules which in too many cases

have been infringed with or without the connivance of the subordinates in former years. It is admitted that the unrecorded cases in many other districts which show light returns are very numerous, owing to weakness of establishment.

36. There were some serious cases. In *Cuddapah* a reserve watchman was found murdered, but the accused were acquitted. A case of embezzlement against a permit issuing gumastah is under inquiry. A large number of persons were charged with obstructing officers on demarcation duty; but exemplary punishment in a bad case stopped this practice. In *North Arcot* three months' rigorous imprisonment was given for setting fire to a reserve; in *Salem* there were some important cases for theft of sandalwood; in *Ganjám* a watcher who was taking two men, who had been felling wood illicitly, to the ranger was set upon by some villagers in an attempt at rescue, and killed: two men were sentenced to four years' rigorous imprisonment each for this; in *North Coimbatore* a theft of rosewood by some influential men met with exemplary punishment; this was all the more necessary as theft, particularly of sandalwood, is rife. In *South Malabar* the most important cases related to the removal of boundary pillars and the cultivation of land in an attempt to gain possession of Government escheat lands selected for reservation. These were still pending at the end of the year.

37. With reference to the remarks made in the foregoing paragraphs the Board considers that it must be borne in mind that it is a matter of extreme difficulty to form any opinion on the administration of the penal provisions of the Act from mere figured statements and brief reports. The Collector and District Magistrate of each district alone is in a position to go into the matter thoroughly as cases arise, and Government must look to him to see that compounding is not overdone, and that proceedings in the criminal courts are conducted, not only without grave irregularities, but in such a manner as to inflict a minimum of hardship on petty offenders who in many cases have only broken rules which were new to them without being aware of the gravity of the offences they were committing. If the calendars of the lower courts are carefully scrutinised, and the attention of the District Forest-officer drawn to every case in which an unnecessary or vexatious prosecution has been instituted, much will be done to check any tendency on the part of subordinates to earn rewards or praise by an appearance of zeal in detection, while on the other hand public interests will be served if the District Forest-officer is afforded an opportunity of seeing all calendars of forest cases and thus placed in a position to draw the attention of the Collector and District Magistrate to cases in which Subordinate Magistrates seem to have shown incapacity, or misdirected sympathy with offenders against laws which are not yet popular. So far as the information supplied by the reports and statements go, the Board sees no reason to suspect any serious excess of zeal, except perhaps in the case of South Canara from which a special report has been called for. In this district the number of cases has risen within the last year or two to be the highest in the Presidency although there are practically no grazing cases which largely swell the numbers in other districts. The percentage of compositions is also very high, and a certain number of the cases are said to have consisted of simple trespass.

(c) *Forest fires and fire-protection.*

38. The results of fire-protection are given in the following abstract:—

Fire-protection.

Circle.	Up to 31st March 1892.		During 1892-93 (15 months).			During 1893-94.		
	Area of forest reserves attempted in square miles.	Total cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.
		Rs. A. P.			Rs. A. P.			Rs. A. P.
Northern	1,103½	54 5 8	1,312	98	14 10 0	1,172	90	11 4 11
Central	2,321	46 2 9	2,407	92	9 3 10	2,484	95	5 10 5
Southern	1,172	110 6 3	1,381	98	18 8 6	1,388	95	13 9 5
Total ..	4,596½	64 8 2	5,100	95	13 2 3	5,044	94	9 2 5

The total cost of fire-protection was Rs. 46,155 against Rs 67,020 for the fifteen months of the last report. The decrease is due to the shorter period, the cost in the year before last being Rs. 45,318.

In the Central and Southern Circles the area burnt is reported at 5 per cent. of the area attempted : in the Northern Circle at 10 per cent.

In the Central Circle in *Nellore* only 2 per cent. was burnt, in *Cuddapah* 10 per cent., in *North Arcot* 2, in *South Arcot* 1, in *Salem* 3, in *Trichinopoly* there was no fire-tracing, but there were hardly any fires, in *Chingleput* there were no fires. The fires in almost all cases are supposed to have been deliberately caused by cattle-owners chiefly for the sake of getting young grass.

In the Northern Circle the percentage burnt in *Ganjám* was 5, in *Vizagapatam* 2, in *Gódávari* 9, in *Kistna* 4 in one part and 2 in another, in *Anantapur* 9, in *Bellary* 14, in *Kurnool* 35. The fires in *Gódavari* were so heavy a record, because almost the whole of a large reserve was burnt over by the forest inhabitants : and in another part of the district (the Ellore range) the fires are said to have come from the Nizam's forests. In *Kistna* a great difficulty was experienced in checking fires coming over the borders of Kurnool, and in checking incendiarism on that frontier. In *Anantapur* the large percentage may be due to an attempt to protect too much, the area entered this year being nearly double that mentioned in an inspection note in 1892 : fires here are caused chiefly by graziers. In *Bellary* the most careful fire-protection is attempted. There were three fires in each range. In the north-east Range the fires were attributed one to a fire crossing from the Raja's forest, one to carelessness of a traveller, one to incendiarism. In the Ramandrug range the fires were attributed, one to accident when burning the fire lines, one from fire from the Raja's forest, one from lightning. In the Donimalai range two fires came from the Raja's forest, and one is attributed to lightning. Considering that the hills here are masses of iron, the lightning theory is not impossible. There is no doubt that the great danger this year was from the Raja's forest, and the Board regrets to notice the absence of the cordial co-operation in fire-protection which was given by the late Raja. It is surmised that burning the Raja's forest was favoured rather than otherwise by the authorities. In *Kurnool* about 39 square miles out of 111 square miles were burnt. These results are undoubtedly due to deliberate incendiarism by Chenzus, who are about the most impracticable forest tribe in the Presidency, but who have rather unfortunately been conceded rights at settlement which place them almost beyond control. There is probably another element at work besides the usual proclivities of forest men to fire forest for facilitating locomotion, for driving game, or for pure mischief, and that is bribes from graziers. It is useless attempting to protect large areas under the present conditions in these forests. The advisability of firing certain parts of the forest to save the rest, should be carefully considered by the local officers.

In the Southern Circle the area burnt in *Madura* was 2 per cent., in *Tinnevelly* 10 per cent., in *North Coimbatore* 20 per cent., in *South Coimbatore* 2 per cent., in the *Nilgiris* 1 per cent., and in *North Malabar* 3 per cent. There were no fires in *South Malabar*, and hardly anything was burnt in the protected area in *South Canara*. In *Tinnevelly* the fires occurred chiefly outside the area under the strictest protection, and were caused mainly by incendiaries; one or two fires were caused by contractors through carelessness, and some of the fires are attributed to lightning. In *North Coimbatore* fires were very numerous, most of them being supposed to have been deliberate. Fire-protection here however is not systematic.

The returns for all districts are very hard to compare, because, not only do the conditions of growth and climate vary, but the ideas of what constitutes rigid protection vary also very considerably. In some districts regular fire-lines are made, and fire-patrols are systematically trained to their duties, and kept strictly to these duties only, in other districts fire-patrols are treated more as general watchers, in others fire-lines are not considered necessary, but the protection by fire-patrols is considered sufficient, in one district at least fire-lines without fire-patrols is considered sufficient.

39. The cost per square mile consequently varies considerably. For instance in *Nellore*, the cost per square mile actually protected was Rs. 4 ; in *Cuddapah* Rs. 7 ; in *Chingleput* Rs. 13–4 ; in *North Arcot* Rs. 5 ; in *South Arcot* Rs. 3–9 ; in *Salem* Rs. 32. In this last district only a comparatively small area is attempted, the growth is tolerably rapid, and probably the protection is quite systematic. Similarly in the Northern Circle fire-protection is comparatively cheap in *Ganjám*, and some other districts, because general : the average in one part of *Kistna* was Rs. 11–8 per square

mile, in another Rs. 5; while in *Bellary* the average per square mile actually protected was Rs. 33, because here work was thoroughly systematic. In the Southern Circle the cost of fire-protection was reduced from Rs. 19 to Rs. 15 a square mile. In *Tinnevelly* the cost is high, namely, Rs. 30–2, but here it is believed that fire-patrols do some general duty. In *North Coimbatore* the cost is only Rs. 3–9, but the protection is very general. In *South Coimbatore* the cost is Rs. 28–6, but here it is systematic. In the *Nilgiris* the cost was under Rs. 5, but here the operations are much mixed, grass-burning to protect the sholas being one of them: actual fire-tracing is limited. In *North Malabar*, where vegetation is very luxuriant, the protection cost Rs. 24. Protection here was very successful on the whole. In *South Malabar* there were no fires at all, and considering the systematic operations, the cost of a little over Rs. 14–3 was very moderate. In *South Canara* the high rate of Rs. 25–10, per square mile actually protected was reached; but this contrasts very favorably financially with the Rs. 78 of last year. The reason of the difference is a cheaper style of working and because the District Forest-officer trusted to fire-lines, and reduced watchers to a minimum. This succeeded during the season under report, but the Conservator, Southern Circle, doubts the correctness of the policy.

(d) *Grazing.*

40. The following table shows the grazing revenue in each district during the past year as compared with the results for the previous fifteen months:—

Districts.	Revenue from grazing fees, grazing contracts and sale of grass realized in		Rates of grazing fees levied.
	For 1892–93 (15 months).	For 1893–94 (12 months).	
1	2	3	4
	Rs.	Rs.	
Ganjám	2,642	2,801	Half rates charged.
Vizagapatam	75	190	Do.
Gódávari	4,356	3,359	Do.
Kistna	45,425	74,087	Full rates charged.
Anantapur	1,559	2,459	Half rates charged.
Bellary	3,943	2,920	Do.
Kárnool	10,846	11,077	Do.
Total ..	68,846	96,893	
Nellore	15,055	15,584	Grazing is leased out in this district.
Cuddapah	10,954	10,426	Full rates charged.
Chingleput	5,403	5,785	Full rates in some cases and ¼ in others.
North Arcot	11,669	42,782	Maximum on non-privileged and half on privileged cattle.
South Arcot	8,623	15,173	Local cattle, half rates: rest, full.
Tanjore	687	482	Full rates charged.
Trichinopoly	5,303	5,442	Do.
Salem	18,300	19,654	Half rates on privileged, and full rates on non-privileged cattle.
Total ..	75,994	1,15,328	
Madura	1,014	3,075	Do. do.
Tinnevelly	4,280	5,311	Do. do.
North Coimbatore	41,250	27,588	Do. do.
South Coimbatore	14,625	6,286	Do. do.
Nilgiris	4,936	7,420	The maximum on the district non-privileged cattle, half on privileged cattle, and (under special sanction) double the maximum on alien cattle.
North Malabar	455	1,226	Three annas on buffaloes and two annas on cows, bulls, &c.
South Malabar	128	79	Grass is cut and not grazed in this district.
South Canara	..	3,685	Half rates.
Total ..	66,688	54,670	
Grand Total ..	2,11,528	2,66,891	

Compared with the returns for the previous fifteen months there was an increase in the Northern Circle of Rs. 28,047, an increase in the Central Circle of Rs. 39,334, and a decrease in the Southern Circle of Rs. 12,010: the nett increase being Rupees 55,363.

In the Northern Circle the increase accrued almost entirely in the Kistna district, where there was an increase of Rs. 28,662, from which, however, Rs. 5,000 will have to be refunded because charged on dharmakhandams (free grazing grounds). This is the great grazing district of the Circle, and the District Forest-officer paid much attention to the question of regulating the grazing departmentally as far as possible, to the exclusion of contractors. The main principle is the dividing up of the forests into grazing parcelles of some 5,000 acres each. A separate fee is charged for each parcelle, but a guarantee is given that only a certain number of cattle will be admitted into each. There was some opposition last year, but the system is further developed during the current year with good results in the increase of revenue, and absence of complaints. During the year the grazing in the forests was for the most part regulated departmentally, and the remaining waste only leased to contractors. Previously the forests were leased also. Complaints were so frequent against contractors that their agency will be restricted as much as possible. As regards other districts in the Circle few remarks seem called for. Grazing is not properly regulated in most of them, and a considerable development of revenue might be made without unduly pressing on the resources of the people. There was a slight increase in *Kurnool*, where the system of leases was re-introduced owing to want of establishment. The Board considers that the reversion to a system of leases is to be regretted and that it would have been better if temporary establishments had been applied for. Leasing saves trouble and presents a fictitious appearance of economy, but every evil which can prevail under a departmental system can thrive under leases with a greater freedom from control. Of course the departmental detailed supervision of grazing makes much greater demands on the time of the controlling officers, but grazing is a most important matter and on grounds both of policy and finance it is right that it should receive much attention from all officers of the department. There was a slight increase also in *Anantapur*, but a decrease in *Gódávari*.

Central Circle.—The only districts in this Circle where there were considerable advances in revenue compared with the figures for the previous fifteen months were *North Arcot*, where the increase was Rs. 31,113 and *South Arcot* where the increase was Rs. 6,550. In the former the excess is due in great measure to the fact that permits were sold late in the previous year and the revenue credited during the year under report; in the latter it is due to stricter supervision. In this district alien cattle are charged full fees and local cattle half fees. This distinction may be justified in certain places from local considerations, but it seems open to question whether this policy is applicable to a whole district. Although the returns under this head from other districts show only small variations from last year, yet there is an improvement in most districts considering that the returns are for twelve instead of fifteen months. Care seems to have been taken in most districts to prevent overgrazing, but this is difficult in all cases. In *Trichinopoly* owing to a combination among contractors the grazing was not leased out, but permits were sold departmentally.

Southern Circle.—There was a decrease in the whole Circle under this head, occurring in North and South Coimbatore. There was an increase in Madura, Tinnevelly, Nilgiris and North Malabar, and fees were collected for the first time in South Canara. In this latter district half rates were charged and Rs. 5,685 collected, which is a good beginning. In *North Malabar* fees are collected only in the reserved forest. In the *Nilgiris* the system of annual instead of quarterly permits was introduced, half the special double rates sanctioned for the district being charged for non-privileged cattle of the district, half those rates for privileged cattle, and full special rates for foreign cattle. In backward parts half these rates were charged. In this district the payment of a single fee entitles the holder to graze his cattle in any part of the district open to grazing. Nearly 1,800 Toda buffaloes were allowed to graze in the reserves free. The Conservator questions this policy as Todas have special pattas set apart for their buffaloes. In *North Coimbatore* the decrease of Rs. 13,662 represents almost exactly the difference between returns for twelve as against fifteen months. Practically there is no attempt at regulating the grazing in this district. In *South Coimbatore* the falling off in revenue is explained by the statement that certain overgrazed areas were closed. The Conservator remarks that this hardly explains it, as only 58 square miles out of 591 were closed. The Board observes, however, that the overgrazed areas which have been closed were those which immediately adjoined and many owners who will make use of grazing lands close at hand will not send their

cattle to distant forests. It is said that full rates were charged, and that the owners of every holding of 10 acres or less were allowed to graze three animals at half rates. There was a nett decrease in the returns of Rs. 8,339, compared with those of the previous fifteen months.

The difficulty of distinguishing between agricultural and non-agricultural cattle is experienced in almost every district. The distinction was not made in the Northern Circle and is but imperfectly carried out in the districts of the Central and Southern Circles, in which it is said to be in force. The further information called for by Government on the Board's suggestion to adopt a uniform fee for both descriptions of cattle will shortly be submitted to Government.

41. *Grass-cutting and hay-making.*—Bellary was the only district in the Northern Circle where grass-cutting was attempted. 150,000 pounds of grass were collected and supplied to the Commissariat Department. The cost was Rs. 833–8–6 and the receipts Rs. 1,200. The grass was not real hay. The attempt at regular hay-making last year was unsuccessful. Part of the difficulty is that it is extremely difficult to separate all the débris of last year's grass from hay made in a reserve where fire is rigidly excluded, and complaints were made on this score.

No experiments were made in the Central Circle during the year. The stock in Cuddapah was sold off, the result being a considerable loss.

In the Southern Circle the only district from which any record under this head is given is Tinnevelly, where permits for grass at three and six pies a head-load were issued in a few places where the right to collect minor produce could not be sold. The right to cut grass in a few of the plain forests was leased as usual. It is said that the right to cut grass is included in minor produce contracts and that large quantities of grass are cut in the ghât forests. A small attempt at departmental hay-making resulted in a financial loss.

(c) *Natural reproduction.*

42. The natural reproduction of teak is reported to be unsatisfactory in the Anamalais of *South Coimbatore*, in the Mudumalai and Beni forests of the *Nilgiri* district, at the foot of the hills, and in North Wynaad in the *North Malabar* district. The Board deputed the Senior Conservator, Mr. Popert, to make a special report on the subject, and the question need not be discussed pending this report. Some experiments were made in the Anamalais, and it was found that teak had germinated readily in areas covered with an undergrowth of young bamboo, but the experiments were not carried on over areas covered by dense grass, which is the greatest difficulty to be contended against. It is an undoubted fact that in these forests at present there is a marked absence of teak in the pole stage. The natural reproduction of Sal (*Shorea robusta*) in *Ganjam* was excellent. In the closed areas of *Vizagapatam*, general reproduction continues to be very good; also in parts of *Gódávari*, though parts of this district show very unsatisfactory results, owing to excessive grazing and fires. Coppice is coming on well in *Kurnool* and in the *Acacia Arabica* working circle in *Kistna*. Bamboos have seeded nearly everywhere and the reproduction is good. The natural reproduction of red sanders (*Pterocarpus santalinus*) from seed in *Cuddapah* is unsatisfactory, but it comes up well from coppice. The reproduction of *Hardwickia binata* is still rather doubtful in *Anantapur*. It is reported to be improving in parts of *Cuddapah*, and experiments are being made in *Kistna* to try to get reproduction both from seed and coppice. In *Salem*, reproduction from seed of the forests generally is said to be not very satisfactory, except in specially protected reserves. Coppice growth in most districts in the Central Circle and Southern Circle is fair. The growth in the Eucalyptus plantations on the *Nilgiris* is as rapid as ever. Experiments have been made in *South Canara* which seem to show that the reproduction of *Acacia catechu* (or sundra) which is here a valuable tree is only a question of protection from cattle.

Fuller notes are given in the Appendix G.

(f) *Artificial reproduction.*

43. The statement below shows the area under plantations, topes, and cultural operations, with the cost during the period under report compared with the figures of the preceding year:—

Abstract H.—Plantations, topes and cultural operations in other areas.

—	Plantations.								Topes			
	Up to 1892-93		Added during				Total		Up to 1892-93		Added during	
			1892-93.		1893-94						1892-93	
	Area in acres	Cost	Area in acres	Cost of areas in columns 2 and 4	Area in acres	Cost of areas in columns 2, 4 and 6	Area in acres	Cost	Area in acres	Cost.	Area in acres	Cost of areas in columns 10 and 12
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs		Rs		Rs		Rs		Rs		Rs
Northern Circel	934 (a) + 3 (b) — 74	36,794 (a)+ 272 (b)—5,793	2	3,008	114	6,338	979	40,619	3,517	19,520	25	1,902
Central ,,	13,426 (c) — 43	6,73,685	3	26,749	102	18,807	13,488	7,19,241	10,486	3,52,348	— 170	6,577
Southern ,,	6,399	4,62,800	224	18,377	209	13,619	6,832	4,94,826	14,522	61,564	12	327
Total	20,645	11,67,786	229	48,134	425	38,764	21,299	12,54,686	28,525	4,33,432	— 133	8,806

—	Topes—*cont*				Other areas							
	Added during		Total		Up to 1892-93		Added during				Total	
	1893-94						1892-93		1893-94			
	Area in acres	Cost of areas in columns 10, 12 and 14	Area in acres	Cost	Area in acres	Cost	Area in acres	Cost of areas in columns 18 and 20	Area in acres	Cost of areas in columns 18, 20 and 22	Area in acres	Cost
	14	15	16	17	18	19	20	21	22	23	24	25
		Rs		Rs		Rs		Rs		Rs		Rs
Northern Circle	..	1,302	3,542	22,724	422 (a) — 3	5,988 (a)— 272 (b)+ 5,793	37	1,872	261	1,679	717	15,060
Central ,,	(d)— 1,228	4,179	9,088	3,63,104	3,831 mls 100	42,865	42	2,450	133	1,392	4,006 mls. 100	46,707
Southern ,,	2	306	14,536	62,197	2,172	14,954	312	3,535	431	1,742	2,915	20,231
Total ..	— 1,226	5,787	27,166	4,48,025	6,422 mls 100	69,328	391	7,857	825	4,813	7,638 mls 100	81,998

(a) Shown under cultural operations in the return for 1892-93 by mistake
(b) Abandoned as a plantation and shown under cultural operations.
(c) By rectification of area
(d) Transferred to departments which exercise real control over these areas.

44. *Plantations.*—The additions during the year in Casuarina plantations were 65 acres in *Ganjám*, at a cost of Rs. 57 an acre. The work was thorough and there were few casualties. There were 8 acres added in *Gódávari*, and 41 acres in *Kistna*. In this latter district the circumstances were different, the work being done to a considerable extent by gardeners sanctioned under the temporary establishment, whose work was concentrated on these planting operations, as it was considered that the scattered attempts made before were unsatisfactory. In *Gódávari*, 17,300 trees cost Rs. 1,080, which gives an average of sixteen trees per rupee. In *Ganjám*, 63,464 trees cost Rs. 3,717, which gives an average of seventeen trees per rupee.

In the *South Arcot* district it is said that 84 acres were planted up with Casuarina at a cost of Rs. 14 an acre. There must be some mistake in these figures, or watering must have been almost entirely dispensed with. In the *Tanjore* district, 48 acres were planted with casuarinas. There was a very large expenditure in *North Arcot* on mixed plantations. The returns are very difficult to check, and it would seem from the results reported that planting is not quite systematic here. It is hard to pick out the details for plantations proper from cultural operations, the nature of which is more experimental. In *Trichinopoly* in the plantations along the Cauvery the stock is composed of *Acacia Arabica*, *Casuarina*, *Cassia floribunda*, and *Inga dulcis*, with a few scattered Tamarinds, *Albizzia Lebbek* and *Melia Indica*. It is found that not one-fifth of the Casuarina and Cassia trees supposed to have been planted since these lands were taken up in 1871–72 now exist, and *Inga dulcis* is rapidly killing out the Casuarina. In future it is thought that no planting will be necessary, as the areas felled become restocked naturally with *Inga dulcis*, *Cassia* and *Babul*.

An area of 102 acres was added to the Casuarina plantation, at *Nellore* at an average cost of Rs. 30½ an acre. This average seems very low, but efforts were made to keep down the charges for watering (the main expense) as low as possible, and plants were watered only once in two days in high places, and once in three days in low places. If this should prove sufficient the cost of Casuarina planting will be materially reduced. As Nellore is a district in which Casuarina has been planted more extensively than in any other, it is useful to gather a few hints from experience. Under the unscientific planting of the Jungle conservancy days the plantations were a financial failure, so far as can be calculated. They seem now to be a success. The District Forest-officer has calculated from statistics that the average cost per acre under the Jungle conservancy was Rs. 109, and since 1883 when Jungle conservancy was merged with forests the average cost per acre has been Rs. 37. The returns for an expenditure of Rs. 1,77,060 prior to 1883 are calculated to be Rs. 1,70,536, or a loss of Rs. 6,524; and the returns on an expenditure of Rs .17,995 since 1883 are calculated at Rs. 28,675, or a profit of Rs. 10,680.

Twenty acres of Eucalyptus were planted on the Palnis in *Madura*; and seventy acres were added to the plantations on the *Nilgiris*. One hundred and twenty acres of fresh planting was added to the Nilambúr teak plantations.

Great care should be taken in each district to scrutinize these lists, and see that the areas felled over are separate from the areas under wood, else statistics get utterly confused. The numbers of trees planted should also invariably be given by the rangers, as comparisons by acreage alone are often misleading. The cost of fresh planting should be separated from upkeep of former years' planting.

45. *Cultural operations.*—The areas entered in the form No. 60 comprise an area of 2½ acres in Ganjám, of 258 acres in Bellary, and 133 acres in Nellore. Palmyra seeds were sown in *Ganjám*, wild date seeds in *Bellary*, and broadcast sowing of various seeds was made in *Nellore*. In the Southern Circle various experiments were made over 421 acres in *Tinnevelly*, chiefly by broad cast sowing; and on the *Nilgiris* ten acres were planted up under the Badaga plantation scheme already sanctioned. There were various attempts made in other districts, which seem to have been considered more as experiments as they are not entered in the form.

Further particulars under these heads and on experiments and exotics are given in the Appendix G.

46. *Topes.*—The number of topes is given in form 61. A few topes were handed over to the Revenue Department during the year. This list is still not quite reliable for all districts. Many of the so-called topes are mere waste land, some are being merged into reserved forests. In many districts serious efforts have been made, or are being made, to have these lists definitely settled, but the matter should be finally taken up in all.

(g) *Communications and Buildings.*

47. The following statement shows the outlay on communications and buildings and other works for two years' reports :—

	Fifteen months ending June 1893.	1893-94.
	Rs.	Rs.
Roads and bridges	37,286	41,421
Buildings	59,395	34,229
Other works	3,625	3,604

Expenditure on roads was in excess of that for the previous fifteen months, while that on buildings was considerably less. This latter decrease was due partly to an endeavour to reduce the cost of buildings generally, partly to delay in some works owing to a discussion about introducing more method into the form of camps in general.

A list of the chief roads and buildings is given in the Appendix H.

In the Northern Circle a sum of Rs. 6,272 was spent on roads, of which the larger part was spent in Kistna, the next largest expenditure being in Ganjám. In *Kistna* some very useful roads were made, and it is hoped that the road made to the Kurnool frontier may be carried through the forest to join a main road, for roads are much wanted for general use in this part. In *Ganjám* a road was finished, and some 24½ miles of inspection paths were made in the sál forests. These are made narrow, but as straight as possible, and all roots are extracted. These paths are extremely useful, and were very well planned and executed by the District Forest-officer. In *Anantapur* 2 miles of inspection roads were made and in *Bellary* 5 miles of bridle roads.

In the Central Circle a sum of Rs. 8,506 was spent on roads, the chief expenditure being in North Arcot, the next being Chingleput and Salem. In *North Arcot* 7 miles of new roads were constructed, in *Chingleput* 3¼ miles, while in *Salem* the expenditure was chiefly on special repairs on two roads for railway fuel-supply.

In the Southern Circle there was a large expenditure of Rs. 26,643. There was a very large expenditure in *Tinnevelly* both on construction and repairs, but distances are not clearly given. The Conservator, Southern Circle, remarks that with the present small establishment better results could have been secured if the work had proceeded more slowly. The large expenditure in *North Coimbatore* was spent chiefly on the repairs of some large roads, which were originally made and kept up by other departments. It would be very bad policy to allow these expensive roads to go altogether to ruin. The expenditure in *South Coimbatore* was in connection with the timber slip and transport roads for heavy timber. The slip was completed during the year, the bottom being paved with poles placed *longitudinally*. It is 800 yards in length. The District Forest-officer calculates on a considerable saving in the cost of transport. In *North Malabar* extremely good work was done, some 39 miles of new traces were made at an average of Rs. 56 a mile. In *South Malabar* the work consisted chiefly of repairs. In *Madura* several inspection paths, a road, and a preliminary trace were made during the year. On the *Nilgiris* the expenditure was on repairs and metalling.

The expenditure on buildings in the Northern Circle was largest in Kistna and Kurnool, and fairly evenly distributed among the other districts. The chief new works were four rest-houses, four range camps, one range office enlarged, ten cheap inspection sheds, one range-house.

In the Central Circle the chief expenditure was in North Arcot, Salem and South Arcot. The chief work was the building of a substantial house, substantial repairs to a range office, and the extension of three forest houses.

In the Southern Circle the chief expenditure was in Madura, Tinnevelly, North and South Coimbatore, South Malabar and the Nilgiris. The chief new works were the building of one rest-house, of four serambis on posts, of six guards' houses, a sandalwood shed and store, four range offices, and some guards' lines.

48. *Tramways.*—The statement in Appendix I gives the results of the working of tramways.

The tramway from *North Arcot* was sent to *Nellore*; 1¼ miles was sent to Srîharikotta fuel circle, and 1¼ miles to the casuarina plantations. This additional plant did not reach *Nellore* till January 1894, and was not put up till some months afterwards, so that although full debit was taken, the stock was not utilized to its full extent during the year. The wagons received from *North Arcot* are much worn, and new wheels will probably be required, which will deduct from the profit, but the District officers anticipate a profit on Srîharikôta working next year with the full plant, and hope that this profit will eventually cover up the deficit. It is calculated that the nett loss in Srîharikôta up to the end of the year under report is Rs. 1,567, and that the nett gain in the casuarina plantations is Rs. 14,825.

The tramway in *Cuddapah* is calculated to have been worked at a loss of Rs. 539 during the year, because no engine fuel was taken by the railway, but a doubt is expressed in the report if there will be sufficient material or a sufficiently steady demand to make a tramway pay here.

The total loss on the *South Coimbatore* tramway up to date is calculated at Rs 19,025, the loss last year being much lighter than usual, because more material was extracted.

CHAPTER V.

YIELD AND WORKING.

49. The total outturn of the year in timber and other produce compares with that of the previous year as follows:—

ABSTRACT I.—Comparative yield as per Forms Nos. 69, 72-A and 72-B.

—	Timber (in cubic feet) including sandalwood.		Fuel (in cubic feet).		Bamboos (in number)		Minor produce (gross value in rupees)	
	1892-93 (1st April 1892 to 30th June 1893).	1893-94 (1st July 1893 to 30th June 1894).	1892-93 (1st April 1892 to 30th June 1893).	1893-94 (1st July 1893 to 30th June 1894).	1892-93 (1st April 1892 to 30th June 1893).	1893-94 (1st July 1893 to 30th June 1894).	1892 93 (1st April 1892 to 30th June 1893)	1893 94 (1st July 1893 to 30th June 1894).
1	2	3	4	5	6	7	8	9
By Government Agency ..	292,300	(a) 291,554	2,038,099	(b) 3,122,250	34,039	(c) 35,245	48,951	23,773
By purchasers (including confiscations)	2,634,450	2,734,778	10,098,923	9,061,738	20,652,606	25,198,215	7,54,097	(d) 7,65,430
Free grants	39,806	46,164	1,543	1,008	92,748	70,801	207	1,853
Total ..	2,966,556	3,072,496	12,138,565	12,184,996	20,779,393	25,304,261	8,03,255	7,91,056
Increase or decrease in 1893-94 as compared with 1892-93	..	+ 105,940	..	+ 46,431	..	+4,524,868	..	— 12,199
Percentage of increase or decrease over the previous year's total	..	+ 3 6	..	+ 3	..	+ 21 7	..	— 1 5

(a) Includes 122 cubic feet, being excess found on remeasurement of timber collected and taken to depôt in previous years as per form No 70.
(b) Includes 19,905 cubic feet, being excess found on remeasurement as per form No. 70.
(c) Includes five bamboos, being excess found on recounting as per form No. 70.
(d) Includes grazing fees.

NOTE.—The value of minor produce given above is that of the quantity *disposed of*, not that of the quantity *collected*, as the value of the latter is not known.

It is difficult to compare the results as the figures for 1892–93 appertain to a period covering 15 months, while those for the year under review are for 12 months. The differences will, however, be explained below under the several heads making due allowance for the difference in the periods.

The average approximate yield during the year per square mile of forest area under immediate control amounted to 847 cubic feet of timber and fuel, 1,466 bamboos and Rs. 44 worth of minor produce as against 879 cubic feet, 1,209 bamboos and Rs. 47, respectively, in the preceding year.

Section I.—Departmental operations.

50. The subjoined table shows the number of trees felled (form No. 68) and those converted into logs or scantlings during the year as compared with the outturn in the preceding year :—

Year.	Balance on hand at the beginning of the period under report.	Number of trees felled during the period under report.	Total.	Converted into logs, &c., during the period under report.	Balance on hand at the end of the period under report.
1892–93 (fifteen months)	1,208	58,002	59,210	58,199 (*a*) + 846	(*a*) 165
1893–94 (twelve months)	165	67,723	67,888	67,673	215

(*a*) The figure 1,011 trees shown as balance at the end of the year in the return for 1892–93 was an error, as, out of this number, 846 trees were converted into logs during the year. The balance was therefore only 165 trees.

The above statement reveals that the number of trees felled during the year was considerably larger than in 1892–93, notwithstanding the fact that the operations of the latter year comprised a period of fifteen months. There was a falling off in the number felled in Gódávari, Kistna, Bellary and North Arcot. In *Gódávari* the decrease is due to departmental cutting having been stopped in favour of the contract system, in *Kistna* to the introduction of a controlled seigniorage system, in Bellary there was a decrease because sanction for the working-plan in Sandúr arrived late in the season, and in *North Arcot* because many coupes were felled by contract. This decrease is more than counterbalanced by the increase in Nellore and Nilgiris. No explanation has been afforded for the very large number (40,666) of trees felled in the former district; but it is known that most of these trees were small, for the coupe system yielded very low returns, and there were a large number of casualties among casuarinas. The increase in the *Nilgiris* is mainly accounted for by the felling of a large number of blue gum trees under the prescribed working-plans and by the yield from a number of windfalls.

51. The following abstract compares the produce collected and disposed of by the department with that of the previous year :—

ABSTRACT J.—Produce collected and disposed of (Forms Nos. 69, 70 and 71).

Produce collected.	During 1892–93 (from 1st April 1892 to 30th June 1893).			During 1893–94 (from 1st July 1893 to 30th June 1894).		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber, in cubic feet ..	288,744	62,802	0 3 5	(*a*) 287,940	71,512	0 4 0
Fuel, in cubic feet ..	2,038,099	84,900	0 0 8	(*b*) 3,122,250	89,620	0 0 5
Bamboos, in number ..	34,039	1,492	0 0 8	(*c*) 35,245	367	0 0 2
Sandalwood, in cubic feet	3,556	3,697	1 0 8	3,614	4,192	1 2 7
Minor produce, in maunds of 25 lbs. ..	38,430	29,088	0 12 1	24,582	11,967	0 7 9
Total ..	..	1,81,979	..	..	1,77,658	..

(*a*) Includes 122 cubic feet found in excess in depôts as per form No. 70.
(*b*) Do. 19,905 do. do. do. do.
(*c*) Do. 5 bamboos do. do. do.

Produce disposed of.	During 1892-93 (from 1st April 1892 to 30th June 1893).			During 1893-94 (from 1st July 1893 to 30th June 1894).			Stock on 1st July 1893.	Stock on 30th June 1894.
	Quantity.	Value.	Average.	(d) Quantity	Value.	Average.		
	8	9	10	11	12	13	14	15
		Rs.	Rs. A. P.		Rs.	Rs. A. P.		
Timber, in cubic feet ..	393,490	1,79,592	0 7 4	291,008	1,95,164	0 10 9	158,413 (e)— 566 (f)— 7	154,772
Fuel, in cubic feet ..	2,368,992	1,35,995	0 0 11	2,578,316	1,44,644	0 0 11	562,862 (e) + 566 (g)+ 11,368 (f)— 2,425	1,116,805
Bamboos, in number ..	58,859	4,144	0 1 2	34,245	2,122	0 1 0	6,694	7,694
Sandalwood, in cubic feet	4,140	40,100	9 10 11	2,379	23,548	9 14 4	1,244	2,479
Minor produce, in maunds of 25 lbs. ..	152,082	48,951	0 5 2	56,368	23,773	0 6 9	44,269 (h) + 2,496	14,979
Total ..	..	4,08,782	..	..	3,89,251	..	..	..

(d) Includes that used departmentally, written off, &c., as per forms 69 and 70.

(e) 566 cubic feet was wrongly included under *timber* during 1892-93 instead of under *fuel*.

(f) Shown in excess during 1892-93 by wrong measurement.

(g) 11,368 cubic feet was omitted to be included in the return for 1892-93.

(h) 2,496 maunds do. do. do. do.

Considering the operations of the department as a whole, the quantity of timber and fuel together and the number of bamboos *collected* are in excess of the collections of the year preceding. But taking the districts individually there is a large decrease under timber collected in Gódávari, Kistna, North Arcot, South Malabar and South Canara, which is more than counterbalanced by the increase in Ganjám, Kurnool, Cuddapah, South Arcot, Madura, Tinnevelly, South Coimbatore and North Malabar. The decrease in *Gódávari* is due to the adoption of the contract system for the cutting of timber and in *Kistna* and *North Arcot* to restricted fellings owing to want of demand. The stoppage of departmental cutting of babul in the sample areas of the Guntúr working Circle in *Kistna* also contributed to the decrease in that district. The decrease in *South Malabar* was because there were large stocks on hand from the previous year; that in *South Canara* is due to the failure on the part of Uppinangadi timber contractor to bring down more logs, and also to the working area in Udipi not having been fully worked out, as the scheme was not sanctioned till late in the year and the locality was unhealthy. The increase in *Ganjám* is practically no increase, as all the fellings of 1892-93 were not included in that year's return owing to confusion in the district timber accounts. In *Kurnool* the increase is due to development of departmental work in Nallamalais. In *Cuddapah* there was a large extraction of red-wood roots and stumps for which the demand was brisk, and in *South Arcot* there was an unexpected supply of casuarina posts to Government Telegraph departments. The increase in the other districts which are comprised in the Southern Circle has not been explained.

As regards the quantity of fuel collected there is a very large falling off in Gódávari, Cuddapah and South Canara. This decrease is more than compensated for by the large increase in most of the other districts, *e.g.*, Kurnool, North Arcot, South Arcot, Trichinopoly, Salem, Madura, South Coimbatore and Nilgiris. The decrease in *Gódávari* is ascribed to the change from departmental working to the contract system. In *Cuddapah* the only firewood cut departmentally was that for supply to the district jail, and the decrease in *South Canara* has not been accounted for. The increase in *Kurnool* is ascribed to the development of departmental work in Nallamalais. In *North Arcot* there were extensive improvement fellings in the Napier and Ambur fuel reserves, and *in South Arcot* and *Salem* there was larger demand for fuel for the railway and for the cotton mills in Pondicherry. The increase in *Trichinopoly* is only nominal, as most of it represents the previous years' fellings which were not hitherto brought to account, not having been handed over to the Railway Company. The increase in

Madura was due to the water-works project in that town, and that in the *Nilgiris* to the reasons already explained under trees felled.

The increase under bamboos occurs chiefly in Madura, South Canara and South Malabar, notably in the last-named district where a large number was required for transport of timber. This increase far out-numbers the decrease which occurs in Kurnool, Cuddapah, North Arcot and South Arcot.

The decrease in the quantity of minor produce collected is due in a great measure to non-collection of grass and refusal on the part of the Chenchus to collect myrabolams for the department in *Kurnool*, to failure of soapnut and nux-vomica crops in *Nellore*, and to the stoppage of experimental collections of grass in *Cuddapah*. With reference to disposals the quantity of timber sold during the year was less than in the previous year. The decrease occurs principally in Ganjám, Gódávari, Cuddapah, North Arcot and Nilgiris. In *Ganjám* and *Gódávari* the adoption of the contract system contributed to the decrease. In *Cuddapah* there was an absence of demand, and in the Nilgiris there was a difficulty in finding good saleable teak. No explanation has been furnished for the decrease in *North Arcot*. There were minor decreases also in a few other districts, but they were counterbalanced by increases elsewhere.

It is observed that the quantity of timber sold during the year under report was less than during the year preceding and yet the amount realized was greater. This is accounted for by the higher rates secured in certain districts.

The quantity of fuel disposed of shows an excess over that of 1892–93. The increase occurred notably in Gódávari, Bellary, Kurnool, Cuddapah, North Arcot, South Arcot, Trichinopoly, Salem, Madura and South Coimbatore. The chief cause contributing to this increase is greater demand in these districts; in *Bellary* large quantities were required in the manufacture of sugar. As regards the disposal of bamboos, the total number disposed of in 1892–93 includes about 23,500 bamboos used either for departmental purposes or written off as useless, while in 1893–94 the number similarly treated is only about 1,000. Deducting these tems from both years' figures, the difference will be found to be very small.

Under disposals of minor produce there was decrease in Kurnool, Cuddapah and South Canara due to causes explained under collection.

The cost of collection under all the heads is less except under timber which is slightly more than in 1892–93. The increased cost rate is due to the difficulty of procuring labour and to the cost of cutting in coupes being greater than in plantations. The rates of prices realised in the case of timber and minor produce are slightly better than in the previous year.

Section II.—Removals by purchasers under the permit system.

52. The following table shows the removals by consumers and purchasers under the permit system during the year as compared with the preceding year :—

ABSTRACT K.—Produce removed by permit-holders on seigniorage or otherwise (Appendix 72-A).

	During 1892–93 (from 1st April 1892 to 30th June 1893).			During 1893–94 (from 1st July 1893 to 30th June 1894).		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	1,364,512	1,23,528	0 1 5	1,843,750	2,15,256	0 1 10
Firewood .. .. .. „	2,859,225	55,644	0 0 3	2,618,590	55,062	0 0 4
Bamboos .. .. .. No.	11,858,261	68,638	0 0 1	16,747,964	89,189	0 0 1
Grass and grazing	..	68,670	..	..	96,831	..
Minor produce	..	82,538	..	..	1,24,427	..
Total ..	..	3,99,018	..	..	5,80,765	..

Abstract K.—Produce removed by permit-holders on seigniorage or otherwise (Appendix 72-A)—*cont.*

	During 1892-93 (from 1st April 1892 to 30th June 1893).			During 1893-94 (from 1st July 1893 to 30th June 1894).		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
Central Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	976,233	96,557	0 1 6	670,508	63,096	0 1 6
Firewood .. .. .. „	3,681,693	1,50,804	0 0 8	3,382,384	1,16,633	0 0 6
Bamboos .. .. .. No.	6,460,979	77,824	0 0 2	7,029,103	81,149	0 0 2
Grass and grazing	..	76,595	..	..	1,15,283	..
Minor produce	..	2,99,025	..	..	2,79,274	..
Total ..	..	7,01,705	..	..	655,435	..
Southern Circle.						
Timber .. .. .. C. ft.	250,900	45,592	0 2 11	175,290	36,999	0 3 5
Firewood .. .. .. „	3,517,831	91,706	0 0 5	2,997,942	69,772	0 0 4
Bamboos .. .. .. No.	2,291,488	25,850	0 0 2	1,402,531	20,845	0 0 3
Grass and grazing	..	66,677	..	..	55,142	..
Minor produce	..	1,58,830	..	..	93,597	..
Total ..	..	3,88,655	..	..	2,76,355	..
Presidency Total. Timber .. .. C. ft	2,594,645	2,65,677	0 1 7	2 689,548	3,15,351	0 1 11
Presidency Total. Firewood .. .. „	10,058,749	2,98,154	0 0 5	8,999,516	2,11,467	0 0 5
Presidency Total. Bamboos .. No.	20,610,728	1,72,312	0 0 1	25,179,598	1,91,183	0 0 1
Presidency Total. Grass and Grazing ..	..	2,11,942	..	..	2,67,256	..
Presidency Total. Minor produce ..	..	5,41,293	..	..	4,97,298	..
Grand Total of sales, Rupees ..	..	14,89,378	..	..	15,12,555	..

The total value of sales as compared with that of the previous year shows a net increase of Rs. 23,000 as noted in the margin. Considering that the revenue of the year under report was for twelve months as against fifteen months of the preceding year, it seems at first sight as if the prices realised compared with the outturn of produce were abnormally high, but a large payment in Ganjám for railway sleepers was to a great extent in the nature of an advance. The value of the sales realised under timber, bamboos and grazing and grass shows a large increase, while that under fuel and minor produce shows a decrease. The average rate of sale shows an increase in respect of timber, that for fuel and bamboos remaining the same as for the previous year.

	Rs.
Timber	+ 49,674
Firewood	— 56,687
Bamboos	+ 18,871
Grazing and grass	+ 55,314
Minor produce	— 43,995
Total ...	+ 23,000

The increase in the value of timber sold occurred principally in Ganjám, Vizagapatam, Gódávari and Kistna against which there was decrease in the value of the disposals in almost all the other districts, more or less due to the fact that the period under report comprises twelve months against fifteen months in the preceding year. The increase in the districts named was due to better demand by the local public and particularly to the large advance for sleepers for the East Coast Railway in Ganjám.

The general explanation as regards the difference in the period of the two years' operations accounts more or less for the decrease also under firewood. Large decreases however occurring in Gódávari, Cuddapah, Chingleput, North Arcot, South Arcot, Tanjore, Trichinopoly, Tinnevelly, North and South Coimbatore, South Malabar and South Canara, call for explanation. There were also increases in certain other districts, but the differences are small and call for no remark. The decrease in *Gódávari* is due partly to the stoppage of cutting of green fuel in some reserves and partly to competition from private forests, while in *Chingleput*, *North Arcot*, *Tanjore* and *South Canara*, it is due to the crediting of the revenue from poramboke and other unreserved lands to Land Revenue miscellaneous with reference to orders embodied in Board's Proceedings, Forest No. 638, dated 31st August 1893. In *South Arcot* there was difficulty in getting proper contractors to fell coupes, and the Collectors of *Cuddapah*, *Trichinopoly*, *Tinnevelly* and *North* and *South Coimbatore* have not explained the decrease in these districts. The decrease in *South Malabar* is due to the small quantity of materials yielded by the sub-compartment in the Walayar reserve compared with the yield of former years, the coupes being situated on hilly ground.

The Conservator, Southern Circle, suggests that all removals by contractors from working circles under the particular supervision of the department should more properly be credited to removals by Government Agency. This view does not seem quite tenable. The main question is whether the cost of felling is debited against the department or not. If a contractor is employed and the department pays for the felling the contractor is simply in the position of a member of the temporary establishment, and the operations would come under I (*a*). If a contractor makes the felling at his own cost there is no corresponding debit for the operations against the department, and they should come under II (*a*).

Under bamboos the principal districts which contributed towards the increase are Gódávari and North Arcot. In the former district the increase was chiefly due to the abnormal demand for props for sugarcane plantations and for export to other localities, and in the latter district to the better price offered.

The increase under grazing which is noticeable chiefly in the districts of Kistna, North Arcot, South Arcot and South Canara is explained in chapter IV of the report.

Under minor produce the decrease occurs in Gódávari, Chingleput, North and South Arcot, Salem, Madura, North and South Coimbatore, Nilgiris and North Malabar. The decrease in *Gódávari*, *Chingleput* and *South Arcot* is due to transfer of certain items of revenue to the Land Revenue Department; in *North Arcot* to the non-realisation of a fair price for manure leaves and other minor produce owing to slack demand for want of timely rains; in *North Coimbatore* to the crediting in the accounts of 1892–93, a large sum appertaining to the accounts of 1893–94; and in *Nilgiris* to the realisation during 1892–93 of two years' fees in advance. The Collectors of *Salem*, *Madura*, *South Coimbatore* and *North Malabar* have furnished no explanation for the variations in their respective districts.

53. The subjoined statement shows the comparative cost of departmental and private working and the net profit derived from each class of produce under each system :—

Items.	Measure.	Quantity collected (Forms 69, 70 and 72).	Amount of sale-proceeds (Forms 71 and 72).	Add or deduct increase or decrease in value of stock in hand.	Net financial result (column 4 + or − column 5).
1	2	3	4	5	6
Departmental Working—			Rs.	Rs.	Rs.
Timber	Cubic feet.	287,940	1,95,164	— 15,782	1,79,382
Fuel	Do.	3,122,250	1,44,644	— 1,461	1,43,183
Bamboos	Number.	35,245	2,122	+ 161	2,283
Sandalwood	Cubic feet.	3,614	23,548	+ 3,142	26,690
Minor produce	Maunds.	24,582	23,773	— 102	23,671
Private Working—					
Timber	Cubic feet.	2,689,548	3,15,351	..	3,15,351
Fuel	Do	8,999,516	2,41,467	..	2,41,467
Bamboos	Number.	25,179,598	1,9[illegible],183	..	1,91,183
Grazing	..	Not known.	2,67,256	..	2,67,256
Minor produce	..	Do.	4,97,298	..	4,97,298

Items.	Charges (form 64).			Net profit or loss (column 6 — column 9).	Rate of net profit (column 10÷column 3) per measure in column 2.
	A. Conservancy and Works.	B. Establishment and Contingencies.	Total.		
	7	8	9	10	11
Departmental Working—	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber	71,512	63,365	1,34,877	+ 44,505	+ 0 2 5
Fuel	89,620	79,410	1,69,030	— 25,847	— 0 0 2
Bamboos	367	325	692	+ 1,591	+ 0 0 9
Sandalwood	4,192	3,714	7,906	+ 18,784	+ 5 3 2
Minor produce	11,967	10,604	22,571	+ 1,100	+ 0 0 9
Private Working—					
Timber	16,137	32,820	48,957	+ 2,66,394	+ 0 1 7
Fuel	12,357	25,131	37,488	+ 2,03,979	+ 0 0 4
Bamboos	9,783	19,897	29,680	+ 1,61,503	+ 0 0 1
Grazing	13,676	27,814	41,490	+ 2,25,766	..
Minor produce	25,448	51,756	77,204	+ 4,20,094	..

Note.—A sum of Rs. 57,000, being the cost of Special Forest Settlement-officers and their establishments including their travelling allowance, &c, and the pay and allowances of Mr. R. C. C. Carr, I.C.S., for the three months he was on special duty in connection with the revision of the Forest Code, has been deducted from the total charges under B. Establishment, as per Form No. 64 and the balance has been distributed proportionately on the lines followed in the previous year's report.

From the above it will be seen that the profit under departmental working in respect of timber and bamboos is much greater than that obtained for removals by private agency and the profit under private agency has to be still further discounted in consideration of the fact that a large part of the revenue from Ganjám was an advance. Under fuel, departmental working has resulted in a loss, while private working showed a profit. With reference to the loss under departmental working of fuel, the Board observes that this cannot in some cases be avoided as matters now stand. Careful felling of blocks which have hitherto been badly treated means improved growth hereafter and it is only in a few localities that contractors are to be found who can be relied on to follow the departmental instructions as regards felling. If rules are rigidly enforced the work often comes to a stand-still until taken in hand departmentally.

54. *Confiscated Produce.*—The sales of confiscated produce during the year under report as compared with those of the previous year are shown in the subjoined table :—

ABSTRACT L.—Confiscation.

	During 1892-93 (from 1st April 1892 to 30th June 1893).			During 1893-94 (from 1st July 1893 to 30th June 1894).		
	Quantity	Value	Average	Quantity	Value.	Average.
Northern Circle.		Rs.	Rs. A P		Rs.	Rs. A P.
Timber .. .. .. C. ft	26,809	5,922	0 3 6	15,756	6,077	0 6 2
Firewood .. .. .. ,,	9,804	639	0 1 1	31,643	787	0 0 5
Bamboos .. .. .. No.	5,909	43	0 0 1	10,531	55	0 0 1
Minor produce .. Money value.	..	320	..	..	123	..
Total ..	..	6,924	..	..	7,042	..
Central Circle.						
Timber .. .. .. C ft	7,946	2,825	0 5 9	6,937	2,178	0 5 0
Firewood .. .. .. ,,	22,388	642	0 0 6	13,772	888	0 1 0
Bamboos .. .. . No	26,355	52	0 0 0½	5,662	85	0 0 3
Minor produce Money value.	..	423	..	..	245	..
Total ..	..	3,952	..	..	3,396	..
Southern Circle						
Timber .. .. .. C. ft	7,990	989	0 2 0	22,537	2,662	0 1 11
Firewood .. .. .. ,,	7,982	318	0 0 8	16,807	265	0 0 3
Bamboos .. .. .. No	9,614	103	0 0 2	2,424	34	0 0 3
Minor produce .. Money value	..	119	..	..	508	..
Total ..	..	1,529	..	..	3,469	..
Presidency Total.						
Timber .. .. .. C ft.	42,805	9,746	0 3 8	45,230	10,917	0 3 10
Firewood .. .. .. ,,	40,174	1,599	0 0 8	62,222	1,940	0 0 6
Bamboos .. .. .. No.	41,878	198	0 0 1	18,617	174	0 0 2
Minor produce Money value.	..	862	..	..	876	..
Grand Total ..	..	12,405	..	..	13,907	..

The total net realisation of revenue under this head shows an increase of Rs. 1,502 which is noticeable chiefly in the districts of Kistna, Kurnool, Nellore, South Arcot, Tanjore, Nilgiris and South Malabar. The increase being small calls for no explanation.

Section III.—Free grants of Forest Produce.

55. The following statement exhibits the quantities of timber and other produce removed on free permits during the year under review :—

ABSTRACT M.—Free grants.

Districts.	Timber	Firewood.	Bamboos.	Minor produce.	Total money value.
Northern Circle.	C. FT.	C FT	NO.	Rs.	Rs
Vizagapatam	3,920	..	19,600	..	318
Gódávari	200	.	2,000	..	25
Kistna	900	..	..	67	143
Bellary	..	..	..	1,510	1,550
Kurnool	16,820	..	23,600	124	1,083
Total ..	21,840	..	45,200	1,741	3,119
Free grants of previous year	18,586	..	53,300	176	1,890

Abstract M.—Free grants—*cont.*

Districts.	Timber.	Firewood.	Bamboos.	Minor produce.	Total money value.
Central Circle.	C. FT.	C. FT.	NO.	RS.	RS.
Nellore	13,823	..	..	9	1,515
Cuddapah	2,472	..	2,400	..	117
Chingleput	..	224	625	1	5
North Arcot	421	2	..	30	250
South Arcot	..	400	..	..	25
Trichinopoly	1,730	..	726	..	193
Salem	2,070	..	13,150	..	401
Total ..	20,516	626	16,901	40	2,506
Free grants of previous year	8,278	1,000	22,143	31	1,636
Southern Circle.					
Madura	1,010	..	..	47	104
Tinnevelly	65	..	..	..	4
Nilgiris	2,733	382	7,035	25	529
North Malabar	..	..	1,665	..	25
Total ..	3,808	382	8,700	72	662
Free grants of previous year	12,942	543	17,305	..	1,018
Total free grants for 1893–94 ..	46,164	1,008	70,801	1,853	6,287
Total free grants for 1892–93 ..	39,806	1,543	92,748	207	4,544

No produce was granted on free permit in the districts of Ganjám, Anantapur, Tanjore, Coimbatore (North and South), Malabar (South) and South Canara. The total results of the other districts show a considerable increase as compared with 1892–93. The noteworthy increases occur in Vizagapatam, Bellary, Kurnool, Nellore and Salem. In *Vizagapatam* an extensive fire burnt more than half the number of the houses in Narasapatam during the year and this necessitated the grant of free permits to the cooly laborers. In *Bellary* free permits were issued to ryots for the removal of tangedu bark for manuring the wet lands. In *Kurnool, Nellore* and *Salem* increases are due to the grant of permits for rebuilding burnt houses.

CHAPTER VI.

Financial Results.

56. The revenue and expenditure in each circle for the year under report are compared below with the corresponding figures of the twelve preceding months:—

Items.	Circles.	Forest year, 1892–93 (from 1st July 1892 to 30th June 1893).	Forest year, 1893–94 (from 1st July 1893 to 30th June 1894).
		RS.	RS.
Revenue	Northern	3,79,720	6,04,314
	Central	7,39,254	7,76,451
	Southern	5,29,706	5,62,950
	Total ..	16,48,680	19,43,715
Expenditure.			
A.—Conservancy and Works.	Northern	1,12,616	1,25,402
	Central	2,38,036	2,82,704
	Southern	3,38,337	2,73,634
	Total ..	6,88,989	6,81,740
B.—Establishment ..	Northern	1,85,592	2,01,317
	Central	2,40,861	2,52,572
	Southern	2,26,134	2,32,782
	Total ..	6,52,587	6,86,671

Items.	Circles.	Forest year, 1892–93. (from 1st July 1892 to 30th June 1893).	Forest year, 1893–94 (from 1st July 1893 to 30th June 1894).
		Rs.	Rs.
Total of Expenditure ..	Northern	2,98,208	3,26,719
	Central	4,78,897	5,35,276
	Southern	5,64,471	5,06,416
	Total ..	13,41,576	13,68,411
Net result	Northern	+ 81,512	+ 2,77,595
	Central	+ 2,60,357	+ 2,41,175
	Southern	— 34,765	+ 56,534
	Total ..	+ 3,07,104	+ 5,75,304

NOTE.—For purposes of comparison, the figures of the twelve months ending with the 30th June 1893, were obtained from the Accountant-General's office.

The variations in the figures of the official year 1893–94, compared with those of the preceding official year have been explained in paragraphs 2 and 16 of Board's Proceedings, dated 11th October 1894, No. 632-F. The same reasons apply more or less to the variations in the figures of the corresponding two forest years. The increase in the revenue occurs in all the circles, but chiefly in the Northern Circle. It is mainly due to :—

(1) The large advance received from the East Coast Railway for the supply of sleepers in Ganjám ;

(2) the development of departmental operations in Kurnool and the expansion of the grazing revenue in Kistna ;

(3) the larger demand for fuel from the Madras Railway in Salem and for bamboos for sugar-cane plantations in Gódávari ; and

(4) improved demand and better sales, consequent on a more favorable season than in the preceding year.

Under Expenditure " A—Conservancy and Works " there is an increase in the Northern and Central Circles which is counterbalanced by a large decrease in the Southern Circle. The cost of forest surveys by the Survey of India Party was debited wholly to the Southern Circle in 1892–93, and to the Central Circle in 1893–94. It rose from about Rs. 58,000 in the former to about Rs. 63,000 in the latter year. If this item is left out of account, there is a decrease both in the Central and the Southern Circles. The increase in the Northern Circle is due mainly to the larger outlay on demarcation and on roads and buildings in Kurnool, Kistna and Vizagapatam and to the formation of a large casuarina plantation in Ganjám. The decrease in the other two circles is attributed to smaller outlay on demarcation and buildings generally, to the absence of special charges connected with the payment of compensation in Nellore and North Arcot and to the smaller expenditure under law charges in Tinnevelly.

The increase under " B—Establishments " is mainly due to the return of some of the senior officers from furlough, the promotion of some of the junior officers of the upper controlling staff, the arrival of four new Assistant Conservators from Europe and the payment of exchange compensation allowance.

The net surplus for the year 1893–94 amounted to over $5\frac{3}{4}$ lakhs. The surplus was mainly contributed by the Northern and Central Circles. Looking at individual districts, it is observed that Salem contributed about 17 per cent., Ganjám, Gódávari and Kistna about 13 per cent. each, and North Arcot about 11 per cent. towards the surplus. The small surplus in the Southern Circle was contributed by all the districts except Nilgiris and North Malabar.

CHAPTER VII.

General Remarks.

57. *Forest School.*—The number of officers deputed to undergo training in the Dehra Dun Forest School from each circle is shown in the margin. The total number of trained men in the department was 56, thirteen in the Northern, seventeen in the Central and 26 in the Southern Circles. Four of these were Extra Assistant Conservators, three Sub-Assistants, 28 were Rangers and 21 Foresters.

Circle.	Number deputed in June 1893.	Number deputed in June 1894.
Northern	2	1
Central	3	1
Southern	3	2
Total ...	8	4

58. *Conduct of Establishment.*—In the Northern Circle, the conduct of Forest Rangers and Foresters is reported to have been on the whole good. One Ranger in Vizagapatam was, however, reduced temporarily for disobedience of orders and neglect of duty. In Kurnool, a Ranger was reduced one grade, temporarily, for neglect of duty ; the services of a Forester were dispensed with for incompetency, another resigned, while a third forfeited his appointment by overstaying privilege leave.

In the Central Circle, two Foresters were dismissed, three were suspended, three reduced, and one allowed to resign and another to retire. Some Range Clerks and Guards were also suspended, or dismissed or allowed to resign.

In the Southern Circle, only one Ranger was reduced to a Forester on Rs. 40, for general incompetency.

59. *Health of the Establishment.*—The year was very unhealthy in Ganjám and Vizagapatam. In the latter district, the District Forest-officer himself, and two of his Range officers suffered from fever and one Forest Guard succumbed to it. In Gódávari and Kistna, the general health was fairly good. The whole staff suffered from fever in Kurnool and there were several casualties among them. In the Central Circle, the health of the establishment was generally good, though there were some cases of ill-health in Cuddapah and Salem. In the Southern Circle the general health of the establishment was bad in all the districts except Madura and Tinnevelly.

60. *Elephants.*—One of the four elephants in the Northern Circle died of a large abscess, two were sold and arrangements were being made for the sale of the fourth. In the Southern Circle, two elephants were captured and three died during the year, leaving a balance of 43 animals at the end of the year. The majority of these are too young for work and are being trained by Mr. Hadfield at Nilambur.

61. *Service Books.*—Service Books are reported to have been maintained and verified in all the districts except Gódávari, Kurnool, Bellary, Tinnevelly and North Coimbatore. For these districts no information is furnished by the Collectors.

62. *Inventory of valuable stock.*—From the reports of inspections of the District Forest offices made by Conservators, Assistant Inspectors of Local Funds and Treasury Deputy Collectors, it is gathered that the store registers were not properly kept in Nellore and South Canara ; that they were not closed and balanced annually in North Arcot and Salem ; and that they were correctly maintained in Kistna, Tinnevelly and South Malabar. Information is not available regarding the state of the registers in the other districts. The forms of these registers have been recast in the revised Code awaiting the approval of Government, so as to show readily the stock on hand in each range.

63. *Work done by the superior staff.*—With but few exceptions the officers of the superior staff worked well throughout the year, and even when it was necessary to find fault the errors were not usually due to any want of zeal, while in the case of young officers it was mainly owing to the rapid development of the department having led to their being entrusted with charges which should properly have fallen to men of much longer experience. The most conspicuous piece of work has probably been the scheme for the regulation of grazing in the Kistna district (paragraph 40 *supra*) drawn up by Mr. A. W. Lushington, which it may be observed already gives promises of working satisfactorily in practice besides looking well on paper. There have, however, been many other District Forest-officers who have worked hard and successfully throughout the year in developing, in different ways, the varied resources of their charges.

APPENDIX A.

Forest Settlement.

Particulars of balance of lands under settlement.

District.	Total number and area of blocks brought under settlement up to end of 1893–94.		Total number and area of blocks constituted finally as reserved forests up to end of 1893–94.		Balance at end of 1893–94.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjám	69 *a*— 1	573	11	133	57	440
Vizagapatam	24	303	6	29	18	274
Gódávari	77	1,013 *c*— 12	50	498	27	503
Kistna	112	766 *b* — 9	63	636 *b* — 9	49	130
Anantapur	64	436 *b*+ 9 *b*— 3	45	305 *b* — 3	19	140
Bellary	134	492 *b* — 4 *d* — 3	67	285	67	200
Kurnool	38	1,946 *b*+ 8	14	1,734	24	220
Total ..	517	5,515	256	3,608	261	1,907
Central Circle.						
Nellore	140	588 *b*— 7	117	343	23	238
Cuddapah	140	2,045 *b*+ 10 *c* — 11	112	1,201 *b* + 3	28	840
Chingleput	206	224	111	169	95	55
North Arcot	134	1,070 *b*+ 1 *c* — 3 *d*— 3	104	939 *b*+ 1 *d*— 3	30	128
South Arcot	206	848 *c* — 4 *d*— 1	101	407	105	436
Tanjore	23 *a*— 2	19	21	19	..	..
Trichinopoly	100	201	72	190	28	11
Salem	144	1,212	114	1,027	30	185
Total ..	1,091	6,189	752	4,296	339	1,893
Southern Circle.						
Madura	176	641 *b* — 2	118	524	58	115
Tinnevelly	39	410	39	410	..	..
North Coimbatore	70	1,641 *c* — 6 *d*— 1	56	838	14	796
South Coimbatore	14	574	10	566	4	8
Nilgiris	149	343 *b* + 13	131	248	18	108
North Malabar	14	264	8	151	6	113
South Malabar	26 *b* + 2	301 *d* — 2	6	39	22	260
South Canara	62	222 *b* + 2	26	106	36	118
Total ..	552	4,400	394	2,882	158	1,518
Grand Total ..	2,160	16,104	1,402	10,786	758	5,318

a. Due to clubbing of blocks. *b*. By rectification *c*. At settlement. *d*. Disafforested or unreserved.

APPENDIX A.

Forest Settlement—*cont.*

Particulars of balance of lands under settlement—*cont.*

Districts.	Classification of balance in columns 6 and 7.											
	Settled and reported on								Settled, but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1893–94, but reservation having effected only after 30th June 1894.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collector, District Forest-officer or Forest Settlement-officer.		Total settled and reported on.					
	Number.	Area.	Number.	Area.	Number.	Area.	Number	Area.	Number	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.		S. MLS.		S. MLS.		S MLS.		S. MLS.		S MLS.		S. MLS.
Ganjám	1	1	6	2	19	344	26	347	13	72	18	21
Vizagapatam	1	3	2	20	2	5	5	28	9	80	4	166
Gódavari	..	..	1	7	3	34	4	41	19	241	4	231
Kistna	2	1	4	6	2	14	8	21	15	12	26	97
Anantapur	2	13	5	83	..	..	7	96	..	..	12	44
Bellary	5	28	5	6	4	23	14	57	2	10	51	133
Kurnool	1	2	..	..	..	..	1	2	15	173	8	45
Total ..	12	48	23	124	30	420	65	592	73	588	123	727
Central Circle.												
Nellore	2	17	2	58	1	88	5	163	1	56	17	19
Cuddapah	1	15	..	..	10	419	11	434	4	92	13	314
Chingleput	2	1	26	8	1	1	29	10	65	44	1	1
North Arcot	3	7	..	..	..	..	3	7	8	44	19	77
South Arcot	4	8	10	27	5	18	19	53	50	338	36	45
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	1	..	1	2	..	..	2	2	15	7	11	2
Salem	2	3	..	..	9	127	11	130	6	25	13	30
Total ..	15	51	39	95	26	653	80	799	149	606	110	488
Southern Circle.												
Madura	6	2	..	..	13	24	19	26	6	10	33	79
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	1	1	1	6	5	781	7	788	1	5	6	8
South Coimbatore ..	..	..	..	..	..	..	..	..	4	8	..	..
Nilgiris	10	26	5	80	..	..	15	106	..	..	3	2
North Malabar ..	..	..	..	..	..	..	..	..	3	110	3	3
South Malabar ..	..	..	..	..	..	..	..	..	17	259	5	1
South Canara	..	..	1	9	..	..	1	9	1	22	34	87
Total ..	17	29	7	95	18	805	42	929	32	414	84	175
Grand Total ..	44	128	69	314	74	1,878	187	2,320	254	1,608	317	1,390

APPENDIX A.

Forest Settlement—*cont.*

Particulars of balance of lands under settlement—*cont.*

	Of lands notified under section 4 in the year																			
	1884-85		1885-86		1886-87		1887-88		1888-89		1889-90		1890-91		1891-92.		1892-93		1893-94.	
	Number.	Area	Number	Area	Number	Area	Number.	Area	Number	Area	Number.	Area	Number	Area	Number	Area	Number	Area	Number.	Area
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Northern Circle		S M		S M		S. M		S M		S M.		S. M		S M		S. M.		S M		S M
Ganjám ..	21	375	3	21	..	..	..	.	..	.	..	..	5	3	2	3	15	25	11	13
Vizagapatam ..	..	..	..	..	..	..	..	.		.	..	..	..	..	5	67	13	207	..	..
Gódávari	..	..	2	182	1	8	2	19	.		21	261	1	33	..	..	..	..	..	..
Kistna	..		..	.	..		..		..	.	2	21	1	12	..	..	36	61	10	36
Anantapur	1	34	..	.	3	34	1	17	1	9	..	..	..	..	..	..	2	9	11	37
Bellary	9	34	..	..	.	.	..	..	2	31	..	..	..	..	..	..	41	88	15	47
Kurnool ..	.	..	..	..		.	1	15	.	..		..	..	..	5	25	13	141	5	39
Total ..	31	443	5	203	4	42	4	51	3	40	23	282	7	48	12	95	120	531	52	172
Central Circle																				
Nellore	1	65	3	130	2	32		..	..	..	..	..	..	..	..	..	.	..	17	11
Cuddapah ..	5	584	8	101	.	..	..	..	.	..	..	..	..	..	..	..	2	74	13	81
Chingleput ..	..	.	..		..	..	..	.		..	1	1	..	..	19	16	25	11	50	27
North Arcot ..	..	.	.	..	..	..	..	..	..	..	..	..	..	..	..	..	11	52	19	76
South Arcot	..	..	4	54	1	3	1	3	1	7	..	..	8	172	..	..	54	152	36	45
Tanjore ..	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly ..	..	..	..	..	..	..	..	..		..	..	..	.	..	24	10	..	..	4	1
Salem .. .	4	32	.	..	..	.	1	2	2	19	3	15	2	21	2	61	..	.	16	35
Total	10	681	15	285	3	35	2	5	3	26	4	16	10	193	45	87	92	289	155	276
Southern Circle																				
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39	101 *a* — 2	19	16
Tinnevelly .	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	.	.	..	.	..	..	1	280	..	..	..	..	2	458	2	1	3	20	6	37
South Coimbatore		.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	8	..	..
Nilgiris ..	..	.	1	64 *b* + 13	.	..	..	..	..	..	..	..	..	..	..	..	9	16	8	15
North Malabar ..	2	70	1	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
South Malabar ..	..	..	..	..	..	..	10	19	5 *a* + 2	242 *a* — 2	..	..	..	..	..	..	.	..	5	1
South Canara ..	..	..	2	29 *a* + 2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	87
Total ..	2	70	4	148	..	..	11	299	7	240	..	..	2	458	2	1	55	143	75	159
Grand Total ..	43	1,194	24	636	7	77	17	355	13	306	27	298	19	699	59	183	267	963	282	607

a. Correction.

APPENDIX B.

Causes of delay in the submission of final notifications of forest reserves

1	Causes of delay.														
	Notified under section 16 during 1893-94, but with effect only from 1894-95, i. e., after 30th June 1894	With Board or Government awaiting publication of notification under section 16	Pending preparation of maps	Awaiting disposal of appeals	Awaiting expiry of time prescribed for appeal	Only recently notified under section 4	Awaiting payment of compensation	Awaiting settlement of claims under enquiry	Awaiting District Forest-officer's answers to claims, demarcation.	Settled but final report pending with the Collector or Forest Settlement-officer	Pending with Collector or Forest Settlement-officer for revision of notifications	Awaiting replies to references made to Collector or Board	Awaiting inspection by the Forest Settlement-officer	Other causes, i. e., awaiting return of records from the District Courts, awaiting information from Tahsildars	Total
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ganjám	1	6	3	..	..	7	..	1	8	..	19	.	..	12	57
Visagapatam	1	2	.	.	.	1	..	2	.	9	2	..	.	1	18
Gódávari	..	1	2	1	..	.	..	4	2	12	3	1	..	1	27
Kistna	2	4		1	11	6	1	21	..	1	2	..	..	..	49
Anantapur	2	5	..	..	..	3	..	4	..	4	..	1	.		19
Bellary	5	5	..	..	..	1	1	..	.	3	4	1	47	..	67
Kurnool	1	.	6	1	4	1	.	10	1	..	..	..	..	.	24
Nellore	2	2	..	..	..	15	1	2	..	.	1	..	..	..	23
Cuddapah	1	..	11	2	..	3	..	.	..	1	10	..	..	..	26
Chingleput	2	26	..	..	..	.	.	1	..	65	1	..	..	..	95
North Arcot	3	..	.	..	..	4	..	1	1	7	..	.	14	.	30
South Arcot	4	10	..	1	3	.	..	4	9	15	5	3	35	16	105
Tanjore	..	..	..		..	..	..		.	..	..	..	..	..	..
Trichinopoly . ..	1	1	9	.	5	..	..	4	1	4	.	..	.	3	28
Salem	2	.	3	3	1	..	.	.	..	..	9	6	6		30
Madura	6	..	17	.	..	..	..	..	17	..	13	..	..	5	58
Tinnevelly	..	..	..	.	..	.	..	.	.	..		..	.		..
North Coimbatore	1	1	2	..	..	2		3	..	..	5	..	..	..	14
South Coimbatore	..	.	..	..	..	..	..	..	..	4	..	..	..	.	4
Nilgiris	10	5	..	..	..	2	..	..	..		..	..	1	.	18
North Malabar	..	..	..	1	..	1	.	2	.	..		..	1	1	6
South Malabar	..	..	..	17	..	4	..	1	..	..	..	..	..	..	22
South Canara	..	1	..		..	..	..	.	..	..	..	13	2	20	36
Total ..	44	69	53	27	24	50	2	60	39	125	74	25	106	59	758

APPENDIX C.

Reserved lands not under settlement in square miles.

District	Up to 1892-93.	Added during 1892-93 (fifteen months).	Added during 1893-94 (twelve months).	Total.	Transferred for settlement. Up to 1892-93.	During 1892-93 (fifteen months).	During 1893-94 (twelve months).	Total.	Balance remaining reserved lands not under settlement.
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjám	551	15	a + 6, a + 1	573	535	25	13	573	6
Vizagapatam ..	96	207	e + 1	304	96	207	..	303	1
Gódávari	1,016	b — 3	b — 12	1,001	1,016	b — 3	b — 12	1,001	..
Kistna	666	190: a — 1, f — 9	326	1,172	668	a — 65, a — 3	f — 36, f — 9	757	415
Anantapur	354	15: a + 32, b — 1, f — 3	a + 36, a + 9	442	354	a + 15, a + 39, a — 7, b — 1	a + 36, a + 6	442	..
Bellary	414	a — 94, a — 1	a — 47, a — 4, c — 3	547	352	a — 94, a — 1	a — 47, a — 4, c — 3	485	62
Kurnool	1,764	a + 141, a + 2, f + 8	39	1,954	1,764	a + 141, a + 2	a + 39, a + 8	1,954	..
Total ..	4,861	686	446	5,993	4,785	573	157	5,515	478
Central Circle.									
Nellore	591	a + 2, b — 4	a — 18, a — 7	600	572	a + 2, b — 4	a — 18, a — 7	581	19
Cuddapah	2,024	12: a + 45, a — 14, f + 3	a + 80, a + 7, b — 11	2,146	1,844	a + 96, a + 38, a — 14	a + 81, a + 10, b — 11	2,044	102
Chingleput	195	17	27	239	180	17	27	224	15
North Arcot	912	66: a + 21, b — 2, c — 2, g — 3	a + 76, a + 1, b — 3	1,066	891	a + 85, a + 21, b — 1, c — 2	a + 76, a + 1, b — 3, g — 3	1,065	1
South Arcot	801	a — 7, a — 6	b — 46, b — 4, c — 1	843	650	b — 155, b — 3	b — 46, b — 4, c — 1	843	..
Tanjore	a — 25, a — 1	..	..	24	19	..	..	19	5
Trichinopoly ..	246	a + 5, b — 1, c — 11	1	240	207	a + 5, b — 1, c — 11	1	201	39
Salem	1,289	d + 1, f + 6	a — 26, a — 6	1,316	1,177	..	35	1,212	104
Total ..	6,082	142	250	6,474	5,540	383	266	6,189	285
Southern Circle.									
Madura	498	139	a — 16, a — 2	651	481	144	a — 16, a — 2	639	12
Tinnevelly	411	..	..	411	410	..	..	410	1
North Coimbatore ..	1,951	c — 15, c — 222	b — 6, c — 1	1,737	1,584	20	b — 37, b — 6, c — 1	1,634	103
South Coimbatore ..	584	a — 8, a — 1	..	591	566	8	..	574	17
Nilgiris	385	a — 24, a — 1	a — 15, a + 13	436	312	16	a — 15, a + 13	356	80
North Malabar ..	274	a — 2	3	275	261	..	3	264	11
South Malabar ..	e + 328, e + 1	2	c — 2	329	300	..	c + 1, c — 2	299	30
South Canara ..	1,024	a — 2, a — 2	a — 69, a + 20	1,113	141	a — 1, a — 7	87, + 2	224	889
Total ..	5,456	— 38	125	5,543	4,055	182	163	4,400	1,143
Grand Total ..	16,399	790	821	18,010	14,380	1,138	586	16,104	1,906

a. By rectification. *b.* At settlement. *c.* Unreserved. *d.* Error in previous year's abstract. (*e*) Rounding.
f. By rectification of areas constituted as reserved forests in previous years. *g.* Disafforested.

APPENDIX D.

STATEMENT showing area of reserved forests for which final maps have been prepared

Districts.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.	Districts.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.
	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.
Ganjám	133	107	Trichinopoly	190	(c) 6
Vizagapatam	29	29	Salem	1,027	(a) ..
Gódávari	498	498	Madura	524	524
Kistna	627	(a) ..	Tinnevelly	410	(b) 407
Anantapur	302	302	North Coimbatore ..	838	838
Bellary	285	..	South Coimbatore	566	566
Kurnool	1,734	1,734	Nilgiris	248	248
Nellore	343	343	North Malabar	150	(b) 31
Cuddapah	1,204	906	South Malabar	39	39
Chingleput	169	169	South Canara	106	82
North Arcot	937	688			
South Arcot	407	407			
Tanjore	19	19	Total ..	10,786	7,943

(a) In these districts, it has been reported that none of the reserves have been finally mapped according to instructions, though owing to a misapprehension of the term " finally mapped " it was reported in 1892–93 that all the reserves had been so mapped. It is probable that other similar corrections may yet have to be made in the case of some other districts.

(b) The decrease compared with the figure given in the report for 1892–93 is due to revised estimate of area.

(c) The decrease compared with figure given in the report for 1892–93 has not been explained ; but it is apparently due to the same reason as that assigned for Kistna and Salem.

APPENDIX E.

STATEMENT showing the number of forest offences reported during 1893–94 and the particulars of their disposal.

Districts.		Cases pending at the beginning of the period.	Cases reported during the period.	Total number of cases for disposal (columns 2 and 3).	Number of cases withdrawn.	Number of cases compounded.	Number of cases taken into Court and dealt with by the Magistracy during the period.	Total number of cases disposed of (columns 6, 6 and 7).	Number of persons concerned in cases disposed of.	Balance of cases undisposed of			Percentage of cases withdrawn to cases disposed of.	Percentage of cases compounded to cases disposed of.	Number of convictions.	Number of acquittals.	Percentage of acquittals to cases disposed of by Magistrates.	Amount of compensation fees realized for cases compounded.
										With Magistrates.	With Forest-officers.	Total.						
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
																		Rs.
Ganjám	1892–93	135	231	366	20	23	149	192	614	Not given		174	10	12	90	59	39	239
	1893–94	174	190	364	44	42	195	281	932	82	1	83	16	15	104	91	46	206
Vizagapatam	1892–93	90	764	854	7	244	577	828	1,184	Not given.		26	1	29	530	47	8	635
	1893–94	26	245	271	4	110	110	224	892	28	19	47	2	49	93	17	15	748
Gódávari	1892–93	6	626	632	..	13	255	268	350	351	13	364	..	5	225	30	12	201
	1893–94	364	101	465	24	37	382	443	629	12	10	22	5	8	290	92	24	409
Kistna	1892–93	171	709	880	31	225	306	562	2,070	Not given.		318	6	40	251	55	18	2,052
	1893–94	318	734	1,052	79	500	194	773	2,367	71	208	279	10	65	158	36	18	5,552
Anantapur	1892–93	38	264	302	..	71	203	274	908	Not given.		28	..	26	166	37	18	859
	1893–94	10	310	320	..	91	205	296	777	24	..	24	..	31	151	54	26	402
Bellary	1892–93	5	360	365	..	31	319	350	837	15	..	15	..	9	260	59	18	542
	1893–94	15	194	209	10	15	171	196	504	Not given.		13	5	8	149	22	13	348
Kurnool	1892–93	23	374	397	..	35	353	388	1,331	7	2	9	..	9	215	138	39	675
	1893–94	9	282	291	19	68	146	233	539	57	1	58	8	29	105	41	28	777
Nellore	1892–93	22	148	170	5	57	83	145	532	7	18	25	3	39	65	18	22	283
	1893–94	25	163	188	12	45	106	163	522	24	1	25	7	27	92	14	13	172
Cuddapah	1892–93	178	713	891	..	248	363	611	1,197	Not given.		280	..	41	303	60	16	2,168
	1893–94	280	544	824	35	366	301	702	1,395	69	53	122	5	52	276	25	8	1,048
Chingleput	1892–93	25	298	323	28	200	93	321	653	2	..	2	9	62	70	23	25	559
	1893–94	2	203	205	28	138	33	199	452	6	..	6	14	69	27	6	18	1,032
North Arcot	1892–93	73	884	957	54	518	364	936	1,675	21	..	21	6	55	230	134	37	5,221
	1893–94	21	1,055	1,076	10	617	375	1,002	2,436	10	64	74	1	62	306	69	18	6,159
South Arcot	1892–93	491	1,090	1,581	333	543	518	1,394	4,412	72	115	187	24	39	423	95	18	3,268
	1893–94	187	1,283	1,470	198	671	394	1,263	3,757	58	149	207	16	53	315	79	20	6,181

Statement showing the number of forest offences reported during 1893-94 and the particulars of their disposal—*cont.*

Districts.		Cases pending at the beginning of the period.	Cases reported during the period.	Total number of cases for disposal (columns 2 and 3).	Number of cases withdrawn.	Number of cases compounded.	Number of cases taken into Court and dealt with by the Magistracy during the period.	Total number of cases disposed of (columns 5, 6 and 7).	Number of persons concerned in cases disposed of.	Balance of cases undisposed of.			Percentage of cases withdrawn to cases disposed of.	Percentage of cases compounded to cases disposed of.	Number of convictions	Number of acquittals.	Percentage of acquittals to cases disposed of by Magistrates.	Amount of compensation fees realized for cases compounded.
										With Magistrates.	With Forest-officers.	Total.						
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
																		Rs.
Tanjore ..	1892-93 ..	3	56	59	9	30	13	52	175	7	..	7	17	60	9	4	31	1,518
	1893-94 ..	7	43	50	10	16	16	42	171	8	..	8	24	33	13	3	19	73
Trichinopoly ..	1892-93 ..	63	946	1,009	9	741	156	906	1,705	1	102	103	1	82	100	56	36	3,383
	1893-94 ..	103	605	708	25	530	119	674	1,542	30	4	34	4	79	105	14	12	2,135
Salem ..	1892-93 ..	32	1,033	1,065	88	302	632	1,022	3,798	43	..	43	9	30	502	130	21	2,274
	1893-94 ..	43	834	877	31	246	538	815	3,091	33	29	62	4	30	382	156	29	2,216
Madura ..	1892-93 ..	..	105	105	4	1	89	94	277	Not given		11	4	1	40	49	55	15
	1893-94 ..	11	73	84	..	3	75	78	225	..		6	..	4	63	12	16	45
Tinnevelly ..	1892-93 ..	20	422	442	15	37	380	432	815	10		10	3	9	298	82	22	1,349
	1893-94 ..	10	615	625	132	236	198	566	1,030	14	45	59	23	41	159	39	20	942
North Coimbatore.	1892-93 ..	49	329	378	9	172	88	269	871	Not given		109	3	64	55	33	38	2,372
	1893-94 ..	109	301	410	22	234	135	391	1,175	9	10	19	6	60	91	44	33	2,985
South Coimbatore.	1892-93 ..	46	438	484	34	238	179	451	1,547	10	23	33	8	53	155	24	13	2,950
	1893-94 ..	33	338	371	36	196	109	341	1,114	6	24	30	11	57	82	27	25	2,123
Nilgiris ..	1892-93 ..	36	206	242	19	145	51	215	571	..	27	27	9	67	37	14	27	1,133
	1893-94 ..	27	146	173	21	85	49	155	329	8	10	18	13	55	43	6	12	1,145
North Malabar.	1892-93 ..	..	64	64	..	37	16	53	100	Not given		11	..	70	13	3	19	151
	1893-94 ..	11	57	68	..	32	24	56	111	..	..	12	..	57	33	1	4	190
South Malabar.	1892-93 ..	1	14	15	..	1	14	15	27	..	..	..	..	7	11	3	21	20
	1893-94 ..	..	16	16	..	3	1	4	29	..	..	12	..	75	1	..	..	120
South Canara.	1892-93 ..	49	831	880	31	194	475	700	1,045	135	45	180	4	28	410	65	14	1,626
	1893-94 ..	180	1,675	1,855	54	1,028	355	1,437	1,968	165	253	418	4	71	284	71	20	2,587
Total ..	1892-93 ..	1,556	10,905	12,461	696	4,106	5,676	10,478	26,694	..	..	1,983	7	39	4,458	1,218	21·4	33,493
	1893-94 ..	1,965	10,007	11,972	794	5,309	4,231	10,334	25,987	..	..	1,638	7	51	3,312	919	22	37,595

APPENDIX F.

STATEMENT showing the area of forest reserves closed to grazing, the area grazed over and the average number of cattle grazed per square mile during 1893–94.

Districts.	Area of reserved forests and reserved lands.	Area closed to grazing.	Area open to grazing.	Area grazed over.	Number of cattle and sheep admitted (c).	Average number of cattle and sheep per square mile.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
1. Ganjám	574	179	395	Not known	17,201	Cannot be given.
2. Vizagapatam	303	3	300	Do.	944	Do.
3. Gódávari	1,001	53	948	(a) 948	15,558	16
4. Kistna	1,172	146	1,026	Not given	(b) 109,826	Cannot be given.
5. Anantapur	442	124	318	Do.	14,952	Do.
6. Bellary	547	397	150	Do.	19,246	Do.
7. Kurnool	1,954	56	1,898	1,896	not given	Do.
8. Nellore	601	..		Leased out		
9. Cuddapah	2,146	Not given	Not given	Not given	39,956	Do.
10. Chingleput	239	Do.	Do.	Do.	33,346	Do.
11. North Arcot	1,066	64	1,002	Do.	268,245	Do.
12. South Arcot	843	8	835	835	160,746	191
13. Tanjore	24	1	23	19	3,045	160
14. Trichinopoly	240	106	134	114	15,482	136
15. Salem	1,316	58	1,258	Not given	210,560	Cannot be given.
16. Madura	651	82	569	Do.	14,762	Do.
17. Tinnevelly	411	24	387	107	26,904	251
18. North Coimbatore	1,737	211	1,526	1,526	130,130	85
19. South Coimbatore	(d) 591	58	507	Not given	37,005	Cannot be given.
20. Nilgiris	437	242	195	Do.	34,176	Do.
21. North Malabar	274	84	190	31	8,973	289
22. South Malabar	329	..	..	..	..	..
23. South Canara	1,112	704	408	Not given	26,699	Cannot be given.

(a) A portion of this was open to free grazing and the number of cattle grazed on that portion is not known.

(b) Includes number of cattle grazed on unreserved lands.

(c) Most of the Collectors have not reported the number of sheep separately from that of cattle.

(d) Includes Tekadi leased forests of 26 square miles.

NOTE.—Demand for grazing in South Malabar was very limited as large areas outside were available for free grazing.

APPENDIX G

Natural Reproduction.

Northern Circle.

In Ganjám, the reproduction of most trees is excellent in Goomsur, that of Sal being prominent.

Reproduction in Berhampur is backward. In Vizagapatam, the growth in the Peddapalli reserve continues good; and in the Golgonda range is marked in Kondavatipudi, where the contrast with the unreserved forest is most marked. In the Golgonda Agency, reproduction is backward owing to fires by hillmen.

In the District report, the question is mooted whether cultivation might not be encouraged in the Golgonda Agency.

In Godávari.—In Bhadráchalam, the grass is so poor that cattle eat the leaves of trees and shrubs largely. Coppice is here strong, however, in parts. Reproduction is not good in Rajahmundry range. There is a fair show of seedlings in Lakkonda; and in the Ellore range in Bandymacherla, which has been successfully fire-protected for five years, there is a very dense growth in the numerous clearings which existed before the forest was taken up. In the Yernagúdem range the reproduction which last year was said to have been exceptionally good in two reserves received a severe check from over-grazing and fires, when the Forest Department was excluded from control. In all the upland taluks bamboos are springing up well. In the coast reserves growth has improved since watchers were appointed.

In *Kistna*, seedlings of *Hardwickia binata* are coming on well in closed reserves. The coppice of *Acacia Arabica* felled last year is 2½ to 5 feet high.

In *Bellary*, Hardwickia seedlings are coming on in Malapangudi and bamboos in Rayadrug. Reproduction is good on the northern slopes of Rayadrug, but not marked elsewhere. There is an improvement in the growth in Chiribi and Sunkadakal and Hardwickia seedlings are numerous.

From *Anantapur* and *Kurnool*, there is nothing new to record. The coppice in the latter in the areas cut for engine fuel when making the railway line is coming on fairly. The growth in the areas treated under Improvement fellings is fair, but there is a high proportion of light wood. General reproduction is much checked by fires.

Central Circle.

In *Cuddapah*, bamboo seedlings of both kinds are coming up freely. Advantage was taken of the seeding and large quantities of seeds were sent throughout India. Red sanders still shows poor reproduction from seed. *Hardwickia binata* improved considerably in Thunukonda and Kódurú where grazing was prohibited; this valuable tree seems specially injured by cattle.

Chingleput.—Coppice in Aradur, Sattiavadu and Tandrai is satisfactory. In *South Arcot*, reproduction is good in the fire-protected areas of Tenmalai. There has been a very good coppice growth of *Acacia sundra* (shoots from 6 to 10 feet) in the Annamalai reserve. In *North Arcot*, bamboos are shooting well. In the protected blocks of Polur and Vellore, *Anogeissus latifolia*, *Chloroxylon swietenia* (Satinwood) and Lebidieropsis are coming up well from seed, and in all the coupes in these ranges the regrowth of these species from coppice seems to be taking entire possession of the ground. Sandalwood regeneration is promising. In *Salem*, natural reproduction from coppice continues good, but growth from seed is not good except under special protection. Sandalwood regeneration is promising in Singampet and Jowlagiri. In Tanjore, coppice is fair. Here, as elsewhere, casuarina coppice is erratic and unsatisfactory.

Southern Circle.

In *Tinnevelly*, it is believed that the treatment of the forest under the coupe system (coppice under standard) is materially improving the general growth at the foot and lower slopes of the hills. Teak seedlings appear in large numbers but dry down in the hot weather. It is believed that a fair percentage, however, maintains its vitality. It is noted that sandalwood seedlings are coming up well in the Alagarcovil valley of the Srívilliputtúr taluk, which is remarkable because there are no sandalwood trees anywhere in this locality. For the 49 coupes, over an area of 2,404 acres, the Conservator's calculations differ from those of the District Forest-officer. He calculates the average outturn of wood at eight tons an acre, and the net profit at Rs. 8 an acre. At a sixteen years' rotation, this would give an income of eight annas an acre. However, the value of the standard trees seems not to have entered into these calculations. More than half the yield is worked up into charcoal.

In the evergreen forests the reproduction of the tree which is most in demand (*Hopea wightiana*) is good.

In *North Coimbatore*, the forest area is vast, and little has been done in the way of fire-protection. Natural reproduction is much hindered by fires and grazing. In *South Coimbatore*, there is a general absence of poles in the teak forest, and a special report by the Senior Conservator is awaited. Some experiments on areas covered with scrub bamboo showed that germination was extensive, but the greatest difficulty is experienced in areas covered by the dense coarse grass. In Pollachi, coppice is promising, also in Bolumpatty; but it is poor in Méttupálaiyam. In *North Malabar*, the reproduction of teak in most unsatisfactory. Blackwood (*Dalbergia latifolia*) reproduces well in places, also *Terminalia tomentosa*, Anogeissus and Lebbek. In *South Malabar*, reproduction is good in Nellikutta and Karunpoya, except in seedlings of teak. In Wálayár, coppice is good. In Chenat Nair, there is a fair growth of seedlings of Xylia, Pterocarpus, Dalbergia and Lagerstroemia. In *South Canara*, experiments have been made which show that the bad reproduction of *Acacia sundra* heretofore was caused almost entirely by cattle. In the Udipi range, there is good reproduction of Hopea, Terminalia and *Artocarpus hirsuta*. In Puttur, *Xylia dolabriformis* reproduces so strongly that fears are entertained for the future of some other valuable species in some places. Throughout the district in fire-traced areas *Terminalia*, *Pterocarpus*, *Hopea*, and to a less degree *Lagerstræmia* and the *Poonspar* have reproduced well from seed.

Seeding.—It was a great year for seeding. Bamboos seeded (both kinds, but chiefly Dendrocalamus) in Gódávari, Cuddapah and South Coimbatore.

Sal (*Shorea robusta*) seeded well in Ganjám, and also Matwa (*Bassia latifolia*).

Terminalia chebula (gallnuts) seeded very largely in Vizagapatam and South Canara.

Tamarind crops were phenomenal in Ganjám, Vizagapatam and Kistna.

Mangoes were very plentiful in Ganjám and South Canara, but scarce in Kistna.

Hardwickia binata in Kistna seeded most prolifically on certain trees, while there were no seeds at all on others; the proportion was about one to two of seeding trees.

Several forest trees seeded largely in South Canara, where notes are kept on these points.

Artificial Reproduction.

In the new casuarina plantation in *Ganjam*, the growth is very fair. In *Kistna*, there was so great a mortality in one plantation from borer that the trees were all clean felled. In the new planting there were a great number of casualties, due partly to unskilled labour, for the work was done by gardeners gathered from outlying topes and the District Forest-officer was unfortunately called away to the other end of the district at the critical time. Some 41 acres were successfully planted however. In *Nellore*, the reproduction of casuarina is not altogether satisfactory. There are a large number of casualties in these plantations, but the cause is not accurately determined. It is probably from a combination of causes, deterioration in the seed, exhaustion of the soil for this particular crop, and the increase of enemies which get a great vantage-ground when large areas are under the growth on which they feed. An attempt is being made to get seed from the natural habitat of the casuarina.

In *Nilambúr*, the reproduction of teak is fair, but there are a considerable number of deaths among the growing stock of various ages. Better success is experienced with the *Swietenia Macrophylla*, than with the *Swietenia Mahogany*, and considerable areas are being planted with Mahogany mingled with the teak. An area of 120 acres was planted up in these plantations during the year.

On the *Nilgiris*, there is an order against growing any more Eucalyptus within the settlements. Seventy acres were planted up outside the settlement with Australian Acacias and *Eucalyptus rostrata*. It is questionable policy to extend the growth of *Acacia dealbata* (yellow wattle) anywhere, as it is an unmixed nuisance in many places from its habit of throwing up root-suckers. Under the Badaga plantation scheme, ten acres were planted up. The growth in the plantations is as rapid as ever.

In *Madura*, on the Palnis, the growth of the twenty acres of Eucalyptus planted during the year is satisfactory.

Cultural Operations.

Various operations were attempted. In *Ganjám* 10,000 palmyra seeds were sown. In *Kistna*, a large experimental garden was established in the Weld reserve and experiments were made, not only with forest trees, but with fruit trees and ornamental shrubs. A sale nursery was opened.

In *Bellary*, an important experimental work in culture was tried, namely, to extend the growth of the wild date, *Phœnix sylvestris*. The subject was mooted by the Deputy Commissioner of the Abkári Department, and the Conservator, Northern Circle, advised the commencement of inexpensive experiments first. Two hundred and fifty-four acres in various places, where the dates grow naturally, were ploughed and sown with date seeds. No watering whatever was to be done, as this is the main expense in plantations. The cost was trifling, and the experiment so far is successful. A number of palmyra seeds were also sown. In the Central Circle, in the returns of North Arcot, there were a variety of operations, which it is difficult to classify. There were great losses in the planting of casuarina and Eugenia in Ammundi plantation and

also in Viringipuram and among the date plants put down in Tiruvallum. There was an absence of early showers. Various experiments were made with sowing seeds of *Cassia auriculata* (Avaram) and Sandalwood, with moderate success in the former case and little in the latter. A large number of palmyra seeds were sown; also bamboo seeds and seedlings with only partial success; and there were very large attempts at broadcast sowing of various seeds.

Fifty pounds of seed of casuarina were received from Tennasserim and distributed to Nellore, North Arcot, and Chingleput chiefly, in order to try to get stronger seedlings.

In *Cuddapah* various attempts have been made, among which the teak plantation at Sauthakora and Seshachellum seems a decided success. Various attempts have been made with Mahogany seeds, but with little decided success.

In the Southern Circle a large amount of experiments have been made in Tinnevelly in sowing palmyra seed, teak, bamboo, casuarina and other seeds; and an attempt was made to reclaim a sandy waste of 13,000 acres. The Conservator, Southern Circle, considers the attempts rather too desultory with our present small establishments.

In *North Malabar* attempts have been made to improve land felled over at Kanoth for shifting cultivation, by sowing a very large number of *Artocarpus* (*integrifolia* and *hirsuta*) seeds. In *South Canara* many attempts were made at broadcast sowing of seeds.

Experiments and Exotics.

Northern Circle.

Ganjám.—The date experiment at Chatrapur is a failure, and an attempt to grow *Swietenia macrophylla* from seed was unsuccessful.

Visagapatam.—Seedlings of *Swieteniam* have germinated fairly well. Seedlings of various indigenous species have been raised in the two topes.

Kistna.—In the Weld reserve seeds of the two Mahoganies were sown, but germinated badly; the few which exist are thriving; the Mahogany in Bezwada is doing well. Some lichi seeds sent by Captain Cardew, R.E., from Calcutta have come up well. Some Mulberry sticks sent from Salem were tried; the thicker ones succeeded. Some cuttings of edible fig were brought down from Palnad taluk, where one tree exists in a village. One cutting has succeeded and looks thriving.

Bellary.—At the Kupgal plantation 4,000 trees have been established at a cost of Rs. 330; they are of various kinds—Mangoes, *Pongamia glabra*, *Albizzia lebbek*, Nim, Tamarind, *Bassia latifolia*, *Eugenia jambolana*, *Psidium pomiferum*, and Mahogany. An attempt has been made to try what kinds of trees will grow in this locality. A native gentleman who takes much interest in experiments has succeeded well with mahogany and dates.

Mahogany.—Out of 1,100 seeds some 250 seedlings have survived in the Ramandrug nursery.

Central Circle.

Date.—*In Cuddapah*, the dates in the Balapalle nursery show no improvements. Of the 105 Persian Gulf dates planted in Periyaveram plantation, 34 died during the year in spite of regular watering.

In Chingleput, the Busrah and South Malabar plants are thriving fairly well, as also the Egyptian dates sown in the Chingleput range. Those sown in Tiruvallúr and Saidapet have all died.

In South Arcot, there remained 140 trees on 30th June 1893 in this district. To this were added six trees, and four having died during the year, the balance at the close of the year was 142 trees, varying in height from 3′ to 10′.

In Tanjore, of the 446 date plants which were planted in 1881 in the north and south date gardens in the Vettangudi forest which remained alive at the close of 1892–93, 116 in the former and 18in the latter survive, varying in height from 4′ to 13′ and 5′ to 12′ respectively. Of the date offsets planted in 1886, five in north garden and 47 in the south garden survive. Only 69 out of the 95 plants planted in November 1892 are alive.

In Trichinopoly, the thirty date offsets imported are in Manattattai plantation varying in height from 13′ to 18′ with a girth of 4′ to 4½′. Of the 800 seeds planted in 1887–88, 569 plants germinated. They were distributed to four plantations and their heights vary from 6′ to 7½′ with a girth of 1½′ to 2′.

In *Nellore* there are two plantations at Allipuram (six miles from Nellore) and at Sriharikóta. There have been many casualties, chiefly at Sriharikóta and chiefly from the ravages of a caterpillar. Sprinkling sulphur powder over the leaves was found to be a temporary remedy.

At present there are over 2,200 date trees alive of Arabian, Persian and Egyptian species, but it is doubtful if the experiment will be ultimately successful.

In *North Arcot* 80,000 date plants were planted during the year, but only 11,000 survived the dry rainless weather.

Mahogany—Cuddapah.—The 113 *Swietenia macrophylla* plants in compartment 3 (*b*) of Balapalle working circle have died. Of those in Kodur Red sanders plantation and Ooperapalle, 90 per cent. have survived the hot weather. These plants were regularly watered, while those in the working circle were not.

Chingleput.—Of the 40 seedlings at Saidapet, 39 are flourishing, one having died.

South Arcot.—To the 180 trees in the district at the beginning of the year, 234 trees were newly added, but 16 died, leaving at the end of the year 398 trees. The old trees vary in height from 3′ to 12′, those put out during the year varying from 4″ to 6″.

Tanjore.—Of the 35 trees that remained at the commencement of the year in the Vettangudi reserved forests, six died during the year, leaving 29 varying from 9′ to 25′ in height. The mahogany does not appear to thrive well in the district.

Trichinopoly.—The mahogany plants in the Cauvery south bank plantation are not doing well, probably through the neglect of the Range officer.

Peltophorum ferrugineum.—In *South Arcot* there were 777 trees at the close of last year in Siruvadi and Murungapakam. 172 of these trees either died or were washed away in floods, leaving 605 trees on 1st July 1894 with a height of 23′.

Red Sanders.—In *South Arcot*, 8 plants were added to the existing 28 trees in the Relief camp tope in the Tindivanam range.

Sissu.—In *South Arcot*, to the 548 trees that remained at the end of 1892-93, 151 were added during the year, all of which remain alive. They vary in height from 25′ to 40′.

Burma bamboos.—In *Chingleput*, these Burma bamboos are in good condition.

Ceara Rubber.—In *South Arcot*, of the 214 trees which remained alive at the commencement of the year under report, 14 were blown down and one died, leaving 199 trees at the end of the year, their height varying from 25′ to 30′. A large number of plants from self-sown seeds was also available.

Erythroxylon cocoa.—In *Cuddapah*, the plants at Horsleykonda have improved somewhat during the year.

Acrocarpus fraxinifolius—Cuddapah.—The plants planted in the Balapalle working circle have suffered much. Those which were put out in compartment 3 (*b*) are doing well.

Southern Circle.

Tinnevelly.—Some of the blue gums planted at a height of 2,500 feet in 1884 have reached, a height of sixty feet.

North Coimbatore.—Little of importance.

South Coimbatore.—Some Mahogany seeds were sown, and came up well.

Nilgiris.—Conifers.—The *Pinus insignis* plants raised last year were planted in Kengal block and the plants are thriving.

Cupressus Forulosa and Cashmeriana.—These plants in Ebbanad nursery are doing well and will be planted out.

Pinus pinea.—The forty plants in Sim's Park have made some progress, and are now from 2 to 4¼ feet in height with a girth of 1¼ to 2 inches.

Pinus halepensis.—The thirteen plants that survived last year have all died since. The locality is evidently not suitable.

Pinus laricio Austriacea.—All the plants died during the year.

Bucklandia populnea.—These have made very fair progress and the largest are 19 feet in height and 8 inches in girth at 3 feet from the ground.

Podocarpus elongatus.—The growth of this is very slow, the largest being only 3½ feet high and ¾ inch in girth though planted in 1885.

Acacia decurrens.—The 2,300 trees planted in 1887 at Coonoor Peak are doing well, the largest having attained a height of 38 feet with a girth of 30 inches.

Acacia Pycnantha.—These have also made fair progress, the largest being 10 feet high and 1½ inch in girth.

Phœnix sylvestris.—The plants at Tippacadu and Kullar have died.

Eucalyptus various species.—Almost all the *Eucalyptus* plants in Sim's Park are reported as doing fairly well. Twenty-eight varieties have been received from Messrs. Sheppard and Sons, Sydney, New South Wales, and are being experimented with in the Badaga plantations and cultural operations in the Ootacamund range.

Bamboos.—The Japanese bamboos planted in Cully shola (Kengal) last year are thriving. Several root-suckers have come up and the parent plants are between 1½ and 9 feet in height.

Dendrocalamus Hamiltonii—The two specimens of this bamboo planted in Sim's Park in 1889 are doing well and the biggest is 28 feet in height, the largest culm being 8 inches in circumference.

Dendrocalamus Sikkimensis.—The three plants in the Sim's Park are doing well. The culms vary from 17 to 20 feet in height with a girth of 7½ inches.

Beesha Travancorica.—The eight plants in the Benhope nursery are now from 6 to 15 feet in height and 4 inches in girth and are making satisfactory progress.

Dendrocalamus Brandisii.—The plants at Benne are doing well.

Manilla hemp (Musa textilis).—Five plants were planted at Benne and they are making fair progress notwithstanding the ravages committed by the elephants.

The *Swietenia Mahogany* at Kullar on the banks of the river continue to flourish. The largest trees are 39 feet in height and 14 inches in girth.

Swietenia Macrophylla.—The plants put out in the Kullar reserve are now 5 to 25 feet in height and 6 to 18 inches in girth, the largest being 25 feet high and 18 inches in girth. The 153 plants planted in April 1891 in the Benhope nursery are now 3 to 4 feet high and ¼ to 1 inch in circumference. The 460 plants raised in this nursery in June 1893 are 3 to 18 inches in height and the 1,570 seedlings in September 1893 are one to two inches in height ready for planting out. The 150 plants round the Benne rest-house are prospering, but those planted in the experimental block are not so good and are more or less liable to damage by elephants. The plants raised in the nursery in June and July 1893 have been basketted and will shortly be planted in the experimental block. Two hundred and forty-one seeds were sown in beds in the Kengal block and almost all of them have germinated and are between two and three inches high.

During the year a small quantity of Chinese guava seeds were received from Tinnevelly and tried in the Benhope, Benne and Kengal nurseries. Those sown in the last nursery have germinated but the others failed. Two pounds of *Aleurites triloba* were received from Manantoddy and tried at Benne and Benhope. Thirteen plants were raised and planted in the Benne range office compound, but none of those seeds sown at Benhope germinated.

Fifteen varieties of Osier cuttings, four of each, were received from the Royal Botanic Gardens, Kew, and planted in the Marlimund reserve. Of these four varieties died out completely; of eight others only one plant of each survives and the remaining three kinds are so far promising.

North Malabar.—Little was done during the year. Thirty *Ficus elastica* were planted at Mukkie, thirty at Dindimal and seventy at Kuppadi. The cuttings planted in 1872 at Kanoth do not look well. The growth of four trees at Manantoddy seems excellent. It is supposed that they were planted before 1885. They are 25 feet in height and well grown.

Mahogany—Have proved a failure.

Giant Bamboos (Dendrocalamus Brandisii).—These are growing excellently wherever planted, as also is *D. longispathus.*

Cephalostachyum pergracile.—Thirteen clumps continue to do well and are now over 35 feet high.

Beesha Travancorica—Grows well at Manantoddy. The height is 25 feet. Mr. Gamble gives the height at 6 to 8 feet. This may be another variety.

Golden Burma Bamboo.—Eight clumps growing well at Manantoddy. The District Forest-officer as an experiment made 512 cuttings, on which 249 have rooted.

Cæsalpinia sappan—Do not thrive.

Phœnix dactylifera—Do not thrive.

Bixa orellana—Grows well.

Eucalyptus.—There are 45 growing well; four species.

Pithecolobium saman—Does well in the low-lying land, but badly on the hill.

Hevea Braziliensis—The two plants grow well. There are three at Kanoth doing well.

Vanilla.—The growth is good throughout the garden, especially on the pandal, and the crop this year was fairly heavy. The cultivation is not being extended as there is no market for the pods.

Ceara rubber trees grow like weeds and reproduce readily from seeds.

Pepper.—Doing well.

Liberian coffee.—The one tree is doing well, and seed has been planted.

Besides these various fruit trees have been planted at different places.

South Malabar.—The Giant bamboos and the Ceara, Castilloa and Hevea rubbers continue to do well.

The Ipecacuanha does not thrive. This experiment might perhaps be tried again with fresh plants in another place. It is believed that the original growth of the plants was checked.

South Canara.—All the eleven clumps of *Bambusa longispatha* are doing well.

Some experiments are being made with *divi-divi* and the two species of Mahogany; but success is indifferent and doubts are entertained as to the practical utility of continuing them until experimental gardens under proper supervision can be established.

The four clumps of bamboo at Uppinangadi are doing well.

Works of Improvement.

Northern Circle.

Ganjám.—Creepers were cut over 4,350 acres at a cost of Rs. 350.

Kistna.—No departmental creeper cutting was done, but creepers were allowed free of charge from certain reserves, and advantage was taken of the offer.

About 400 acres in Kanukolla reserve have been given on cowle for six years on condition of the entire removal of prickly-pear.

Bellary.—Removal of prickly-pear and some fencing was all that was done during the year.

Kurnool.—Improvement fellings were continued at Chelama; these were rather in the nature of thinnings than fellings owing to want of knowledge on the part of Rangers; the financial results were correspondingly improved.

Improvement Fellings.

Central Circle.

Improvement fellings proper are not reported from any district except North Arcot where 1,659 acres were treated under this system; and Trichinopoly where an improvement felling was made over 240 acres in Shenmalai reserve, and over 200 acres in another reserve.

Attempts at systematising the removal of produce by establishing regular coupes, however, has been carried on in various districts, which will eventually improve the forests immensely by preventing haphazard felling. In *Salem* this has been carried on largely, partly by the agency of contractors, partly departmentally. The coupes sold to contractors had an area of 1,812 acres, and realised Rs. 10-7-0 an acre against Rs. 8-8-0 last year. The yield in material was about six tons an acre, the system being coppice under standard.

In *North Arcot*, 3,515 acres in various reserves were felled partly as pure coppice, partly as coppice under standard.

In *Nellore*, attempts have been made on a smaller scale in some inferior reserves, the return being only 1½ tons an acre in Gudur, a little over a ton in Vendodu, and less in Survaypalli.

In *South Arcot*, also the coupe system has been introduced with varying success.

Minor attempts at improvement by removal of prickly-pear, &c., are reported from several districts.

Works of Improvement.

Southern Circle.

Nilgiris.—Creepers and undergrowth were cut in eight acres in Governor's Shola, and the sales more than covered the cost.

In Coonoor, an improvement felling was made in part of Sim's Park.

Some compartments of Bandy Shola were thinned.

Improvement fellings were made in Mudumalai and Benne, but there is no demand there for the produce.

South Malabar.—In the Nilambúr plantations, there is always heavy work under this head, consisting in weeding, pruning, parasite clearing, and thinning.

A sum of Rs. 5,125 was spent.

South Canara.—The remaining eighty acres of Ajarkadu were subjected to an improvement clearing during the year, at a nett cost of only about one rupee an acre.

Ten acres were cleared in Poitaji and ten acres in Kayerpalle firewood reserves.

The walls of these reserves were rebuilt.

APPENDIX II.

Roads.

The following is a list of the principal new roads completed during the year under report :—

Ganjám.—The Kullada-Pilsingi road and 24½ miles of inspection paths.

Kistna—

Roads—

(1) From Kakirala to Minsalapad (4 miles).
(2) From Srigompad to Nittamgunta (8 miles).
(3) From Kakirala to Ravulapuram (6 miles).
(4) From Karalakshminadugu to Rimidicherla (6 miles).
(5) The third section of the Kondapalli hill road (1 mile).

Anantapur.—Inspection paths in Jannavaripalli reserve.

Bellary.—A bridle-path on the ridge of the north-eastern range.

Cuddapah.—The Cuddapah-Kottimadugu road and addition to the Balapalli-Chintagunta road.

Chingleput.—A road (3½ miles long) from the Varadayapalayam-Kálahasti Local Fund road to the bridle-path at the foot of the Kambakkam hill

North Arcot.—The Kylasagiri road, a road to Morthana bungalow and the Karnatioghur road.

Salem.—The Nagaluthu road and the Kundukotta-Anchetti road extension.

Madura.—The Vannathiparai, Soranganar, and Arisaparai Inspection paths; the Kudraiyar road and Karandamalai preliminary trace.

Tinnevelly.—Road from Athithondu to Puliyuthu; Rajahpalayam bridle-path; Shembagadevi road; cart road from Chengalmari to Kaluthakaduvu; Kallimalai road; cart road in Nelliyuthu; cart road from Kariyar to Karuthalipudai; road from the foot of Kadiem hills to coupes; and conversion of Nadugani bridle-path into cart road.

South Coimbatore.—Opening a bridle-path from Mount Stuart to tramway and from Gopavari along the Bhaváni river; timber slip work; opening a new road from Ponnuthuthavalam to Keerapatti hills.

North Malabar—

Edathorai-Mudumalai road (5 miles).
Sultan's Battery to Odapallam road (6½ miles).
Doddapalem to Kurchat 2¾ miles.
Kartikolam to Chedleth (18 miles).
Begur to Bavally bridge (4 miles).
Begur-Antersanta road to Buttakkalthittu (2 miles).
Buttakkalthittu to Coorg frontier (1½ miles).
Deviation to Begur Antersanta road (1⅜ miles).
Bridle-path from Brahamagiri lodge to Coorg frontier (¾ mile).

South Malabar.—A cart-track (3½ miles) in Wálayár reserve.

Buildings.

The following is a list of new buildings completed during the year under report :—

Ganjám.—A guard shedat Tarsingi and a rest-shed at Augusti Nowgam.

Vizagapatam.—An inspection shed at Peddapetta

Gódávari.—Rest-houses at Bhadráchalam and Boddigudem and a guard's shed at Coringa.

Bellary.—Construction of residences for foresters and guards in several places.

Kurnool.—Range house at Atmakur

North Arcot.—A bungalow on the Kylasagiri hill.

Salem.—The Alangayam Maharajagadai and Andiappanur rest-house extensions.

Madura.—Forest stations at Munar, Kanavoipatti, Kumili and Pambar; rest-houses at Timmarasanayakanur, High-waving Mountains and Machur, and out-houses at Mariyan Shola

Tinnevelly.—Forest guards' and watchers' lines, Range-office at Kadayanallur; tanna at Panagudi.

North Coimbatore.—Range office, chipping shed and sandalwood store-shed at Satyamangalam; four Forest guards' huts, and Range office at Bhaváni.

South Coimbatore.—Construction of a forester's shed at Annipadi; construction of two guard's houses and of clerks' and peons' quarters at Punachi; a building near Easalamanthorai, a guard's house at Iruttupallam, and an inspection shed at Sengalpalam.

North Malabar.—An out-house and stable at Kanoth; double serambis at Muthanga and Chedleth.

South Malabar.—Kalserambi in the Amarampalam reserve; additional room to the District Forest-office; Wálayár Forest guard's quarters.

South Canara.—The reconstruction of the Bandur tanna, and improvements to the Puttur Range office.

APPENDIX I.

Nellore District.

STATEMENT showing the results of transport of wood by tramway compared with transport by country carts in Śrîharikóta Range.

Capital Account, 1893-94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1892-93		16,206	9	5	By depreciation at 6 per cent.		1,300	10	4
,, cost of 1½ miles of tramway materials received from North Arcot district ..		5,470	14	2	,, balance		20,376	13	3
Total ..		21,677	7	7	Total ..		21,677	7	7

Revenue Account, 1893-94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		858	11	10	By balance written off		3,167	3	11
,, road-making repairs, &c.		140	12	2					
,, interest at 4 per cent.		867	1	7					
,, depreciation at 6 per cent.		1,300	10	4					
Total ..		3,167	3	11	Total ..		3,167	3	11

Work done—2,748 tons of fuel moved over 4½ miles = 12,366 ton miles.
Actual cost of work—12,366 ton miles at As. 4-1 per mile = Rs. 3,167-3-11.
Estimated cost of carting—12,366 ton miles at As. 5-3 per mile = Rs. 4,072-4-0.

Note.—The tramway plant from North Arcot having been received at the end of January 1894 and not having been laid out for some time after, the length of tramway is taken as 4½ miles :—

ABSTRACT.

Year.	Profit. Rs.	A.	P.	Loss. Rs.	A.	P.
1889-90	..			829	15	11
1890-91	..			701	12	9
1891-92	..			1,063	15	9
1892-93	132	15	1	..		
1893-94	905	0	1	..		
Total ..	1,037	15	2	2,595	12	5
Net loss up to the end of 1893-94 ..	..			1,557	13	3

Casuarina Plantation Range.

Capital Account, 1893-94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1892-93		10,456	5	9	By depreciation at 6 per cent.		955	10	2
Cost of 1½ miles of tramway transferred from the North Arcot district.		5,470	14	2	Balance stock		14,971	9	9
Total ..		15,927	3	11	Total ..		15,927	3	11

Revenue Account, 1893-94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		266	13	1	By balance written off		1,859	8	8
,, interest at 4 per cent.		637	1	5					
,, depreciation at 6 per cent.		955	10	2					
Total ..		1,859	8	8	Total ..		1,859	8	8

Work done—1,998 tons casuarina wood carried over 2¾ miles = 5,494½ ton miles.
Actual cost of work—5,494½ ton miles at As 5-5 per mile = Rs. 1,859-8-8.
Estimated cost of country carts—5,494½ ton miles at As. 6-4 per mile = Rs. 2,163-2-3.

Note.—The tramway plant from North Arcot having been received at the end of January 1894 and not having been laid out for some time after, the length of tramway is taken as 2¾ miles as in past year—

ABSTRACT.

	Profit. Rs.	A.	P.	Loss. Rs.	A.	P.
1885-86	1,070	10	9	..		
1886-87	2,610	13	3	..		
1887-88	..			569	14	1
1888-89	2,998	10	0	..		
1889-90	..			164	12	9
1890-91	3,479	1	5	..		
1891-92	2,297	4	8	..		
1892-93	2,799	13	9	..		
1893-94	303	9	7	..		
Total ..	15,559	15	5	734	10	10
Net profit at the end of 1893-94 ..	14,825	4	7	..		

Cuddapah District.

Capital Account, 1893–94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1892–93		13,129	5	2	By depreciation at 6 per cent.		787	12	2
					„ balance of stock		12,341	9	0
Total ..		13,129	5	2	Total ..		13,129	5	2

Revenue Account, 1893–94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		*Nil.*			By balance written off		539	8	9
„ road repairs		14	6	0					
„ depreciation		*Nil.*							
„ interest at 4 per cent.		525	2	9					
Total ..		539	8	9	Total ..		539	8	9

The tramway was not used during the year as the Railway Company did not take any supply of engine fuel.
Loss during the year Rs. 539-8-9.

South Coimbatore District.

STATEMENT showing the results of transport of timber by tramway compared with transport by country carts on the Anamalai hills in the South Coimbatore district during 1893–94 (*vide* Board's Proceedings, Forest No. 274, dated 25th April 1894).

Capital Account, 1893–94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1892–93		55,926	9	0	By depreciation at 6 per cent.		3,376	6	6
„ cost of nine brakes purchased ..		172	8	0	„ balance of stock		52,897	1	8
„ repairs to plant		119	4	8					
„ cost of laying down a new line ..		55	2	6					
Total ..		56,273	8	2	Total ..		56,273	8	2

Revenue Account, 1893–94.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		4,158	9	7	By balance written off		9,921	6	1
„ depreciation at 6 per cent.		3,376	6	6					
„ interest at 4 per cent.		2,250	15	0					
„ repair to roadway		135	7	0					
Total ..		9,921	6	1	Total ..		9,921	6	1

Work done— 1,519 tons (4,861$\frac{1}{16}$ candies or 60,765 cubic feet) of timber moved over, four miles, 6,076 ton miles.

	Rs.	A.	P.	Rs.	A.	P.
Actual charge of carrying—6,076 ton miles at Rs. 1 10 2 = ...				9,921	6	1
Estimated cost by carts—6,076 ton miles at „ 1 0 8 = ...	6,329	2	8			
Annual cost of maintaining cart road before construction of tramway (now saved)	1,200	0	0			
				7,529	2	8
Loss ..				2,392	3	5

ABSTRACT.

Year.	Profit.			Loss.			
	Rs.	A.	P.	Rs.	A.	P.	
1889–90	..			4,155	2	7	*Appendix B.* (against profit and loss statement). Owing to a larger outturn of timber the annual loss is much reduced.
1890–91	..			3,048	9	5	
1891–92	..			4,710	13	9	
1892–93	..			4,718	4	5	
1893–94	..			2,392	3	5	
Total ..	..			19,025	1	7	

1 candy=12½ cubic feet.
1 ton = 40 cubic feet.

Annual Form No. 59-A.

Forest Department, Madras Presidency.

Area of Reserved Forests, 1893–94.

District.	Area on 1st July 1893.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1894.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Northern Circle.						
Ganjám	2,756	113·68	12,060	...	84,816	132·52
Vizagapatam	15,409	24·08	3,344	...	18,753	29·30
Gódávari	282,798	441·87	35,870	...	318,668	497·92
Kistna	405,144	633·04	1,767	5,796	401,115	626·74
Anantapur	64,622	100·97	130,317	1,774	193,165	301·82
Bellary	136,695	213·58	45,915	1	182,609	285·33
Kurnool	1,105,044	1,726·63	4,670	...	1,109,714	1,733·93
Total ...	2,082,468	3,253·85	233,943	7,571	2,308,840	3,607·56
Central Circle.						
Nellore	217,834	340·37	1,420	...	219,254	342·58
Cuddapah	617,774	965·27	155,693	2,503	770,964	1,204·63
Chingleput	98,947	154·60	9,106	...	108,053	168·83
North Arcot	440,601	688·44	161,941	2,979	599,563	936·81
South Arcot	246,590	385·30	14,095	..	260,685	407·32
Tanjore	10,267	16·04	1,893	...	12,160	19
Trichinopoly	121,966	190·57	...	...	121,966	190·57
Salem	618,416	966·28	38,705	25	657,096	1,026·71
Total ...	2,372,395	3,706·87	382,853	5,507	2,749,741	4,296·45
Southern Circle.						
Madura	306,351	478·67	29,153	...	335,504	524·22
Tinnevelly	262,837	410·68	88	5	262,920	410·81
North Coimbatore	317,806	496·57	218,230	...	536,036	837·55
South Coimbatore	362,261	566·03	...	...	362,261	566·03
Nilgiris	149,412	233·46	9,669	...	159,081	248·56
North Malabar	96,081	150·13	...	...	96,081	150·13
South Malabar	25,173	39·33	...	...	25,173	39·33
South Canara	63,939	99·91	3,860	...	67,799	105·93
Total ...	1,583,860	2,474·78	261,000	5	1,844,855	2,882·56
Grand Total ...	6,038,723	9,435,·50	877,796	13,083	6,903,486	10,786·61

Annual Form No 59-B.

Forest Department, Madras Presidency.

Area of Reserved Lands, 1893–94

District	Area on 1st July 1893.		Added during the year	Excluded or transferred to other heads	Area on 30th June 1894	
	Acres	Equivalent in square miles	Acres	Acres	Acres	Equivalent in square miles
Northern Circle.						
Ganjam ..	289,607	452 51	4 627	12,280	281,954	440 55
Vizagapatam ...	178,816	279 40	8	3,227	175,597	274 37
Godavari	366,000	571 87		43,800	322,200	503 43
Kistna .	142,116	222 06	208,149	1,767	348,798	544 99
Anantapur	191,300	298 91	29,114	130,829	89,585	139 98
Bellary	186,632	291 61	30,243	49,060	167,815	262 21
Kurnool	115,438	180 37	25,275		140,713	219 87
Total .	1,469,909	2,296 73	297,716	240,963	1,526,662	2,385 40
Central Circle.						
Nellore .	158,934	248 33	15,285	9,493	164 726	257 38
Cuddapah . .	705,286	1,102 00	61,341	163,617	603,010	942 20
Chingleput .	36,655	57 28	17,671	9,358	44,968	70 26
North Arcot	196 965	307 76	48,665	163,018	82,612	129 08
South Arcot	266,621	416 60	29 293	17,071	278 843	435 70
Tanjore ..	5,446	8 51		2,044	3 402	5 31
Trichinopoly	31,315	48 93	831	161	31,985	49 97
Salem .	206,574	322 77	16,820	38,513	184,881	288 87
Total ..	1,607,796	2,512 18	189,906	403 275	1,394,427	2,178 79
Southern Circle						
Madura .	101,047	157 89	10,680	30,328	81,399	127 18
Tinnevelly .	813	1 27			813	1 27
North Coimbatore ..	797,925	1,246 76	..	222,920	575,005	898 45
South Coimbatore .	16,118	25 18			16,118	25 18
Nilgiris .	112,254	175 40	18 299	9,679	120 874	188 86
North Malabar	77,506	121 10	1,568		79,074	123 55
South Malabar .	186,144	290 85	391	1,230	185,305	289 53
South Canara	591,070	923 54	67,968	15,083	643,955	1,006 19
Total	1,882,877	2 941 99	98 906	279,240	1,702 543	2,660 21
Grand Total .	4 960,582	7,750 90	586,528	923,478	4,623,632	7,224 42

Annual Form No. 60.

Forest Department, Madras Presidency.

Area of Plantations.

Districts.	Number of plantations.	On 1st July 1893.		Added during 1893–94.		On 30th June 1894.	
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Regular plantations.		acs.	rs.	acs.	rs.	acs.	rs.
Northern Circle —							
Ganjám	(a) 1	(a) 3	272	65	3,717	68	3,989
Vizagapatam	..	..	..	..	..	..	..
Gódávari	4	140	10,675	8	1,080	148	11,755
Kistna	16 / (b)— 1	796 / (b) —74	29,127 / (b)— 5,793	41	1,541	763	24,875
Anantapur	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..
Total	20	865	34,281	114	6,338	979	40,619
Central Circle —							
Nellore	11	2,916	2,53,743	102	1,810	3,018	2,55,553
Cuddapah	8	2,100	52,370	..	462	2,100	52,832
Chingleput	6	396·09 / (c) —43·19	35,818	..	1,075	352·9	36,893
North Arcot	5	1,035	1,19,721	..	7,759	1,035	1,27,480
South Arcot	15	1,920·05	1,16,943	..	3,500	1,920·05	1,20,443
Tanjore	7	1,308	20,038	..	1,917	1,308	21,955
Trichinopoly	22	3,754·01	1,01,801	..	2,284	3,754·01	1,04,085
Salem	..	..	..	..	..	..	..
Total	74	13,385·96	7,00,434	102	18,807	13,487·96	7,19,241
Southern Circle —							
Madura	8	184·06	19,939	20	758	204·06	20,697
Tinnevelly	..	..	..	..	..	..	..
North Coimbatore	1	97	35,729	..	115	97	35,844
South Coimbatore	4	28·5	5,002	..	1	28·5	5,003
Nilgiris	19	1,900·50	1,20,769	70	3,819	1,970·50	1,24,588
North Malabar	1	41·50	4,804	..	765	41·50	5,569
South Malabar	16	4,199·75	2,70,349	119·58	7,727	4,319·33	2,78,076
South Canara	4	171·88 / (c) — ·63	24,615	..	434	171·25	25,049
Total	53	6,622·56	4,81,207	209·58	13,619	6,832·14	4,94,826
Grand Total	147	20,873·52	12,15,922	425·58	38,764	21,299·10	12,54,686
Cultural operations.							
Northern Circle —							
Direction	..	..	279	..	..	..	279
Ganjám	4 / (a) — 1	403 / (d) — 3	2,781 / (d)— 272	2·50	410	402·50	2,919
Vizagapatam	..	..	..	..	..	..	..
Gódávari	..	..	..	..	..	..	..
Kistna	5 / (b) + 1	..	2,874 / (e) +5,793	..	726	..	9,393
Anantapur	6	52·16	942	..	24	52·16	966
Bellary	3 / (f)+ 1	4	846	258	506	262	1,352
Kurnool	..	..	138	..	13	..	151
Total	19	456·16	13,381	260·50	1,679	716·66	15,060
Central Circle —							
Direction	..	..	1,156	..	13	..	1,169
Nellore	8 / (f)+ 1	799	4,528	133	477	932	5,005
Cuddapah	15 / (f)+ 1	593	3,576	..	324	593	3,900
Chingleput	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..
South Arcot	3	1,326	1,764	..	34	1,326	1,798
Tanjore	20	1,155	2,129	..	49	1,155	2,178
Trichinopoly	10	Mls. 100	32,162	..	495	Mls.100	32,657
Salem	..	..	..	..	..	..	..
Total	59	3,873 / Mls. 100	45,315	133	1,392	4,006 / Mls.100	46,707

(a) Shown by mistake under cultural operations in the return for 1892–93.
(b) Abandoned as a plantation and shown under cultural operations.
(c) By rectification of area.
(d) Transferred to regular plantations.
(e) Cost of the plantation transferred from regular to cultural operations during the year.
(f) Newly added during the year.

Note.—The areas under cultural operations have not been given by some of the Collectors.

ANNUAL FORM No. 60.

Forest Department, Madras Presidency—cont.

Area of Plantations—*cont.*

Districts.	Number of plantations.	On 1st July 1893.		Added during 1893-94.		On 30th June 1894.	
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Cultural operations—cont.		ACS.	RS.	ACS.	RS.	ACS.	RS.
Southern Circle—							
Madura	2	..	392	..	2	..	394
Tinnevelly	17	2,318·12	6,789	421·39	1,247	2,739·51	8,036
North Coimbatore	..	..	..	..	..	..	..
South Coimbatore	..	..	508	..	..	..	508
Nilgiris	5 (a) + 1	57	8,544	10	493	67	9,037
North Malabar	2	109	2,218	..	..	109	2,218
South Malabar	..	..	..	..	..	..	..
South Canara	..	..	38	..	..	..	38
Total ..	27	2,484·12	18,489	431·39	1,742	2,915·51	20,231
Grand Total ..	105	6,813·28 Mls. 100	77,185	824·89	4,813	7,638·17 Mls. 100	81,998

(a) Newly added during the year.

Note.—The areas under cultural operations have not been given by some of the Collectors.

Annual Form No. 61.

Forest Department, Madras Presidency.

Annual List of Topes and Experimental Gardens, 1893–94.

District.	Number.	Area.	Cost		Remarks.
			During year.	To end of year.	
Northern Circle.		Acs.	Rs.	Rs.	
Ganjám	7	101	..	922	
Vizagapatam	3	78	120	577	
Gódávari	..	..	..	..	
Kistna	7	53	88	2,526	
Anantapur	95	2,885	950	7,569	
Bellary	31	243	142	1,543	
Kurnool	30	182	2	9,587	
Total ..	173	3,542	1,302	22,724	
Central Circle.					
Nellore	111	1,752	..	38,044	
Cuddapah	71	1,630	699	60,892	
Chingleput	(*a*) 10	98·99	139	9,248	(*a*) Eleven in the previous year's return was an error.
North Arcot	(*b*) 71	(*b*) 1,937·86	3,241	43,738	(*b*) The 108 topes shown in excess in the previous year's return have been transferred to the departments which exercise real control over them. Only those under the control of the Forest Department have been retained.
South Arcot	(*c*) 103	475	30	8,997	(*c*) Five topes newly taken over during the year from the Revenue Department. The area has yet to be ascertained.
Tanjore	(*d*) 6	(*d*) 56	..	..	(*d*) Ten topes of 97 acres were transferred to the departments which exercise real control and hence removed from this list.
Trichinopoly	17	77	5	1,822	
Salem	268	3,061	65	2,00,363	
Total ..	652	9,087·85	4,179	3,63,104	
Southern Circle.					
Madura	(*e*) 24	(*e*) 91	10	18,893	(*e*) Two topes newly added.
Tinnevelly	28	106	85	5,262	
North Coimbatore	183	14,032	..	29,067	
South Coimbatore	23	267·45	..	5,361	
Nilgiris	..	..	..	..	
North Malabar	1	20	211	3,605	
South Malabar	1	20	..	9	
South Canara	..	..	..	..	
Total ..	260	14,536·45	306	62,197	
Grand Total ..	1,085	27,166·30	5,787	4,48,025	

Annual Form No. 62.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from fire during 1893–94.

District.	Up to 30th June 1893.		During dry season of 1893–94.				Total cost up to 30th June 1894.
	Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.	
Northern Circle.	Acs.	Rs.	Acs.	Acs.	Acs.	Rs.	Rs.
Ganjám	128,306	9,729	133,500	6,345	127,155	1,613	11,342
Vizagapatam	62,065	1,965	68,076	1,480	66,596	530	2,495
Gódávari	137,799	4,278	138,839	12,532	126,307	1,299	5,577
Kistna	220,971	9,190	107,330	3,910	103,420	1,498	10,688
Anantapur	(a) 152,061	16,133	152,061	13,990	138,071	2,114	18,247
Bellary	72,247	26,069	79,320	11,519	67,801	3,546	29,615
Kurnool	59,482	11,805	71,140	24,923	46,217	2,653	14,458
Total ..	832,931	79,169	750,266	74,699	675,567	13,253	92,422
Central Circle.							
Nellore	108,256	5,724	115,720	2,760	112,960	737	6,461
Cuddapah	427,386	52,871	528,020	52,497	475,523	5,229	58,100
Chingleput	23,776	5,063	23,873	..	23,873	490	5,553
North Arcot	(b) 631,920	30,788	681,850	14,327	667,523	5,241	36,029
South Arcot	127,926	9,040	123,779	1,161	122,618	693	10,633
Tanjore	..	..	..	..	..	..	..
Trichinopoly	(a) 82,660	3,032	82,660	400	82,260	..	3,032
Salem	32,158	21,989	33,602	1,100	32,502	1,652	23,641
Total ..	1,434,082	1,29,407	1,589,504	72,245	1,517,259	14,042	1,43,449
Southern Circle.							
Madura	213,937	45,572	218,734	3,770	214,964	5,201	50,773
Tinnevelly	100,710	29,600	106,239	10,127	96,112	4,503	34,103
North Coimbatore ..	127,804	3,986	129,084	26,281	102,803	572	4,558
South Coimbatore ..	54,390	15,956	57,970	1,001	56,969	2,526	18,482
Nilgiris	219,557	22,894	223,087	1,544	221,543	1,645	24,539
North Malabar	32,187	9,773	33,462	1,000	32,462	1,225	10,998
South Malabar	103,474	(c) 19,621	103,574	..	103,574	2,304	21,925
South Canara	11,735	7,685	16,530	92	16,438	884	8,569
Total ..	863,894	1,55,087	888,680	43,815	844,865	18,860	1,73,947
Grand Total ..	3,130,907	(c) 3,63,663	3,228,450	190,759	3,037,691	46,155	4,09,818

(a) The difference of area between the figure entered in the return for 1892–93 and that entered here is due to rectification of area.

(b) Correct area as now reported.

(c) Correct amount as reported by Collector.

Annual Form No. 63.

Forest Department, Madras Presidency.

Prosecution for breaches of Forest Rules during 1893–94.

Districts.	Cases pending from 1892–93.	New cases of the year.					Total cases.	Disposed of during the year.										Cases pending at close of the year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.																		
Ganjám	174	..	138	41	11	190	364	104	546	91	386	42	(a) ..	44	(a) ..	281	932	83
Vizagapatam	26	..	209	29	7	245	271	93	352	17	77	110	432	4	31	224	892	47
Gódávari	364	..	76	24	1	101	465	290	384	92	120	37	97	24	28	443	629	22
Kistna	318	4	395	272	63	734	1,052	158	513	36	153	500	1,514	79	187	773	2,367	279
Anantapur	(b) 10	6	234	61	9	310	320	151	308	54	217	91	252	..	..	296	777	24
Bellary	15	2	88	93	11	194	209	149	410	22	66	15	18	10	10	196	504	13
Kurnool	9	9	187	37	49	282	291	105	269	41	88	68	143	19	39	233	539	58
Total ..	916	21	1,327	557	151	2,056	2,972	1,050	2,782	353	1,107	863	2,456	180	295	2,446	6,640	526
Central Circle.																		
Nellore	25	..	116	40	7	163	188	92	277	14	79	45	101	12	65	163	522	25
Cuddapah	280	5	265	185	89	544	824	276	483	25	259	366	653	35	(a) ..	702	1,395	122
Chingleput	2	1	105	63	34	203	205	27	74	6	33	138	289	28	56	199	452	6
North Arcot	21	6	399	617	33	1,055	1,076	306	752	69	224	617	1,439	10	21	1,002	2,436	74
South Arcot	187	1	560	636	86	1,283	1,470	315	1,060	79	273	671	1,962	198	162	1,263	3,757	207
Tanjore	7	..	27	12	4	43	50	13	73	3	12	16	42	10	44	42	171	8
Trichinopoly	103	..	171	425	9	605	708	105	360	14	31	530	1,096	25	55	674	1,542	34
Salem	43	3	367	377	87	834	877	382	1,449	156	591	246	934	31	117	815	3,091	62
Total ..	668	16	2,010	2,355	349	4,730	5,398	1,516	4,528	366	1,502	2,629	6,516	349	820	4,860	13,366	538
Southern Circle.																		
Madura	11	..	38	16	19	73	84	63	183	12	42	3	(d) ..	..	..	78	225	6
Tinnevelly	10	10	275	280	50	615	625	159	327	39	72	236	400	132	231	566	1,030	59
North Coimbatore	109	1	99	185	16	301	410	91	248	44	207	234	663	22	57	391	1,175	19
South Coimbatore	33	2	137	159	40	338	371	82	254	27	176	196	609	36	75	341	1,114	30
Nilgiris	27	..	64	81	1	146	173	43	98	6	10	85	184	21	37	155	329	18
North Malabar	11	1	14	21	21	57	68	23	50	1	13	32	48	..	..	56	111	12
South Malabar	..	..	6	1	9	16	16	1	21	..	(c) 1	3	7	..	..	4	29	12
South Canara	180	2	1,455	..	218	1,675	1,855	284	480	71	153	1,028	1,222	54	113	1,437	1,968	418
Total ..	381	16	2,088	743	374	3,221	3,602	746	1,661	200	674	1,817	3,133	265	513	3,028	5,981	574
Grand Total ..	1,965	53	5,425	3,655	874	10,007	11,972	3,312	8,971	919	3,283	5,309	12,105	794	1,628	10,334	25,987	1,638

(a) The number of persons concerned in these cases is not shown separately by the Collector but is included in the number under convictions and acquittals.
(b) Correct figures as now reported by the Collector.
(c) Concerned in a case shown under convictions.
(d) Not given by the Collector.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

SUMMARY of Revenue of the different districts for the forest year 1893-94.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—									
(*a*) Timber	..	441	1,000	571	11	4,438	..	..	6,461
(*b*) Firewood and charcoal ..	..	..	100	2,912	439	777	675	..	4,903
(*c*) Bamboos	..	3	..	..	..	..	..	..	3
(*d*) Sandal-wood	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce	..	..	452	995	65	9	1,200	511	3,232
II. Timber and other produce removed from the forests by consumers or purchasers—									
(*a*) Timber	..	1,01,636	4,127	38,591	25,657	32,125	6,197	6,945	2,15,278
(*b*) Firewood and charcoal ..	..	8,145	7,080	8,302	15,360	7,803	5,099	2,627	54,416
(*c*) Bamboos	..	7,493	6,856	55,840	728	16,508	1,648	145	89,218
(*d*) Grazing and fodder grass	..	2,801	190	3,359	74,087	11,077	2,920	2,459	96,893
(*e*) Other minor produce ..	..	3,634	3,835	4,795	16,319	19,414	28,871	40,871	1,17,739
III. Confiscated drift and waif-wood.	..	379	89	3,511	446	2,345	219	53	7,042
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..
V. Miscellaneous—									
(*a*) Fines and forfeitures ..	..	..	..	..	..	..	..	..	..
(*b*) Refunds	..	55	70	32	25	..	3	..	185
(*c*) Other sources	..	436	752	164	5,363	894	626	709	8,944
Total Receipts ..	..	1,25,023	24,551	1,19,072	1,38,500	95,390	47,458	54,320	6,04,314

MADRAS,
31st August 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Revenue of the different districts for the forest year 1893–94.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber	..	16	12,145	..	2,629	509	969	..	8	16,276
(*b*) Firewood and charcoal ..	..	33,693	427	291	15,262	7,232	18,656	16,774	..	92,335
(*c*) Bamboos ..	..	..	78	..	23	..	78	..	..	179
(*d*) Sandal-wood ..	..	..	..	..	343	114	11,990	..	..	12,447
(*e*) Grass and other minor produce.	..	4,192	181	..	..	..	5	67	..	4,445
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	9,562	13,079	4,715	2,916	992	22,171	9,156	1,025	63,616
(*b*) Firewood and charcoal ..	..	4,173	16,973	5,919	16,954	20,812	34,495	10,829	4,960	1,15,115
(*c*) Bamboos ..	..	90	6,567	230	22,633	3,089	29,020	3,740	254	65,623
(*d*) Grazing and fodder grass..	..	15,584	10,426	5,785	42,782	15,173	19,654	5,442	482	1,15,328
(*e*) Other minor produce ..	..	30,556	77,154	9,192	32,280	28,741	46,874	33,397	4,079	2,62,273
III. Confiscated drift and waif-wood	..	162	413	64	683	1,008	871	80	113	3,394
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	..	..	399	83	552	100	..	1,134
(*b*) Refunds	22	1	5	4	61	57	78	2	4	234
(*c*) Other sources ..	48	209	2,033	1,036	9,224	6,476	2,711	2,136	179	24,052
Total Receipts ..	70	98,238	1,39,481	27,236	1,46,189	84,286	1,88,124	81,723	11,104	7,76,451

Madras,
31st August 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Revenue of the different districts for the forest year 1893–94.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	12,357	76	50,775	6,270	7,630	22,183	64,352	8,469	1,72,112
(*b*) Firewood and charcoal ..	..	20,568	..	1,802	7,540	7,469	..	100	2,091	39,570
(*c*) Bamboos ..	..	..	..	20	299	..	..	1,597	28	1,944
(*d*) Sandal-wood ..	..	2,070	9,034	2	..	..	..	..	..	11,106
(*e*) Grass and other minor produce.	..	68	8	7,678	..	142	45	322	7,641	15,904
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	769	7,175	4,907	13,116	1,687	4,224	3,885	1,236	36,999
(*b*) Firewood and charcoal ..	..	1,043	8,288	9,317	5,672	42,166	25	2,725	1,041	70,277
(*c*) Bamboos ..	..	2,553	9,780	4,209	1,253	498	479	1,293	854	20,919
(*d*) Grazing and fodder grass..	..	7,420	27,588	6,286	3,075	5,311	1,226	79	3,685	54,670
(*e*) Other minor produce ..	..	649	27,087	5,158	31,193	18,412	2,323	2,116	23,399	1,10,337
III. Confiscated drift and waif-wood	..	323	322	137	144	213	3	1,589	738	3,469
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	33	80	120	195	..	5	191	624
(*b*) Refunds ..	42	8	34	90	8	48	..	1	13	244
(*c*) Other sources ..	..	4,939	4,192	2,397	853	1,715	2,429	4,293	3,957	24,775
Total Receipts ..	42	52,767	93,617	92,858	69,543	85,486	32,937	82,357	53,343	5,62,950

MADRAS,
12th October 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM NO. 64.

Forest Department, Madras Presidency, Northern Circle.

SUMMARY of Expenditure of the different districts for the forest year 1893–94.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—									
(*a*) Timber	..	3,468	57	77	2	2,306	..	..	5,910
(*b*) Firewood and charcoal	..	..	62	122	1,143	244	85	..	1,656
(*c*) Bamboos	..	..	..	..	..	..	..	..	..
(*d*) Sandal-wood ..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce ..	..	..	88	137	32	50	833	131	1,271
II. Timber and other produce removed from the forests by consumers or purchasers	..	4,607	2,504	6,715	5,901	8,705	637	1,455	30,524
III. Confiscated, drift and waif-wood	..	757	11	862	7	448	4	..	2,089
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to share-holders in forests managed by Government	..	..	..	..	..	..	10,000	..	10,000
VI. Live-stock, stores, tools and plant—									
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle	434	736	178	119	..	..	..	..	1,467
(*c*) Stores, tools and plant	..	119	68	569	611	41	25	277	1,710
VII. Communications and buildings—									
(*a*) Roads and bridges..	..	1,704	37	..	3,186	382	808	155	6,272
(*b*) Buildings	..	1,576	1,255	1,497	2,558	2,132	1,389	1,157	11,564
(*c*) Other works ..	..	163	7	..	718	..	..	..	888
VIII. Demarcations, improvement and extension of forests—									
(*a*) Demarcation ..	..	1,452	1,721	254	1,946	2,176	1,378	963	9,890
(*b*) Compensation for land and rights ..	..	..	590	..	..	..	119	182	891
(*c*) Surveys and working plans	28	886	644	835	1,189	1,160	779	1,318	6,839
(*d*) Plantations ..	..	4,127	120	1,080	2,355	15	648	974	9,319
(*e*) Protection from fire.	..	1,613	530	1,299	1,498	2,653	3,546	2,114	13,253
(*f*) Other works ..	..	565	2	1	2,811	..	1,657	317	5,353
IX. Miscellaneous—									
(*a*) Refunds	..	20	25	360	1,586	137	678	133	2,939
(*b*) Law charges ..	43	..	..	101	5	..	..	..	149
(*c*) Other charges ..	83	1,369	95	108	1,695	118	..	..	3,418
Total A.—Conservancy and Works.	538	23,162	7,994	14,136	27,243	20,567	22,586	9,176	1,25,402

MADRAS,
1st September 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts for the forest year 1893–94.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem	Trichinopoly.	Tanjore.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	52	7,117	..	865	123	1,162	..	..	9,319
(*b*) Firewood and charcoal ..	..	21,111	222	21	11,540	3,568	12,721	9,526	6	58,715
(*c*) Bamboos ..	..	..	45	..	8	..	44	..	..	97
(*d*) Sandal-wood ..	..	..	..	..	..	47	659	..	..	706
(*e*) Grass and other minor produce ..	..	1,718	190	..	..	..	..	12	..	1,920
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	353	6,616	1,626	1,162	2,121	9,938	2,559	488	24,863
III. Confiscated, drift and waif-wood	..	3	66	..	4	39	154	9	8	283
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	..	..	..	..	..	10	..	..	10
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle ..	..	..	..	..	..	..	..	..	..	..
(*c*) Stores, tools and plant ..	3	955	13	240	10	129	974	61	17	2,402
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	..	394	1,013	5,441	413	895	350	..	8,506
(*b*) Buildings ..	..	118	736	445	2,860	1,193	1,319	300	10	6,981
(*c*) Other works ..	1	..	..	..	972	43	..	..	..	1,016
VIII. Demarcations, improvement and extension of forests—										
(*a*) Demarcation ..	..	567	2,591	2,994	6,253	6,629	4,693	983	10	24,720
(*b*) Compensation for land and rights ..	..	183	635	606	1,456	17	26	..	..	2,923
(*c*) Surveys and working plans ..	60501	465	915	366	540	407	2,666	172	301	*66,333
(*d*) Plantations ..	13	2,287	1,485	1,214	11,000	3,564	65	2,784	1,966	24,378
(*e*) Protection from fire	..	737	5,229	490	5,241	693	1,652	..	..	14,042
(*f*) Other works ..	..	937	802	2,641	8,170	4,237	7,403	4,257	1,919	30,366
IX. Miscellaneous—										
(*a*) Refunds	..	837	398	234	148	98	2,242	208	51	4,216
(*b*) Law charges ..	..	..	9	..	27	105	476	1	..	618
(*c*) Other charges ..	15	..	9	..	108	30	102	1	25	290
Total A.—Conservancy and Works ..	60,533	30,323	27,472	11,890	55,805	23,456	47,201	21,223	4,801	2,82,704

* This is inclusive of Rs. 59,713 being the probable amount of forest topographical survey charges incurred during 1893–94.

Madras,
6th September 1894.

(Signed) M. BHUTTACHARYA,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Expenditure of the different districts for the forest year 1893–94.

Budget heads	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	2,322	..	23,009	5,021	7,848	1,703	9,105	7,275	56,283
(*b*) Firewood and charcoal ..	..	17,281	111	1,242	6,272	3,603	..	5	735	29,249
(*c*) Bamboos ..	..	..	..	8	248	..	..	..	14	270
(*d*) Sandal-wood ..	..	623	3,163	..	..	..	..	..	..	3,486
(*e*) Grass and other minor produce	..	167	172	4,860	..	5	6	35	3,531	8,776
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	1,423	8,380	3,676	1,530	3,064	356	58	3,527	22,014
III. Confiscated drift and waif-wood	..	38	77	8	7	4	1	..	4	139
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	4,500	..	2,500	..	..	..	1,074	..	8,074
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle ..	..	500	..	447	..	..	274	314	..	1,535
(*b*) Feed and keep of cattle ..	..	1,025	..	4,652	..	..	3,738	7,257	246	16,918
(*c*) Stores, tools and plant ..	..	250	..	429	719	1,193	236	198	303	3,328
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	1,660	5,297	3,369	2,458	9,624	2,691	1,549	..	26,643
(*b*) Buildings ..	..	1,174	2,190	2,438	3,578	2,522	854	2,105	823	15,684
(*c*) Other works ..	..	159	70	326	479	48	157	35	426	1,700
VIII. Demarcations, improvement and extension of forests—										
(*a*) Demarcation ..	..	3,152	3,425	1,471	1,510	2,634	1,375	391	1,003	14,961
(*b*) Compensation for land and rights ..	..	347	..	..	..	..	2,000	..	46	2,393
(*c*) Surveys and working plans ..	..	353	379	..	431	1,106	354	878	2,552	6,053
(*d*) Plantations ..	..	4,312	115	1	770	1,332	976	7,727	434	15,667
(*e*) Protection from fire	..	1,645	572	2,526	5,201	4,503	1,225	2,304	884	18,860
(*f*) Other works ..	..	572	462	1,347	3,861	4,551	474	908	1,596	13,771
IX. Miscellaneous—										
(*a*) Refunds ..	..	13	330	119	108	1,581	26	..	98	2,275
(*b*) Law charges ..	..	..	..	8	218	..	487	15	..	728
(*c*) Other charges ..	9	2,805	12	570	108	2	78	40	1,203	4,827
Total A.—Conservancy and works ..	9	44,021	24,755	53,006	32,514	43,620	17,011	33,998	24,700	2,73,634

MADRAS,
12th October 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Expenditure of the different districts for the forest year 1893-94.

Budget heads	Direction	Ganjám.	Vizagapatam	Gódávari	Kistna	Kurnool	Bellary	Anantapur	Total
B —"*Establishments*"	RS	RS	RS	RS	RS	RS	RS	RS	RS
Brought forward, Total A "Conservancy and works" ..	538	23,162	7,994	14,136	27,243	20,567	22,586	9,176	1,25,402
I. Salaries—									
(*a*) Conservators	16,197		..	..				..	16,197
(*b*) Superior officers .	11,059	10,132	5,250	9,325	12,649	9,362	3,000	5,682	67,059
(*c*) Subordinate forest and depôt establishments	987	4,147	2,603	7,579	6,769	8,004	5,396	6,015	40,500
(*d*) Office establishments	10,128	1,836	971	1,905	2,637	2,365	1,312	1,457	22,611
(*e*) Deputation and special allowances .. .	2,084	1,148	450	468	1,079	1,216		753	7,198
II Travelling allowances—									
(*a*) Conservators ..	2,832								2,832
(*b*) Superior officers	2,988	2,193	877	1,904	2,249	2,092	818	1,066	14,182
(*c*) Subordinate forest and depôt establishments	714	1,400	691	2,807	1,953	3,113	1,068	1,170	12,916
(*d*) Office establishments .	1,846	309	114	324	975	619	175	333	4,695
III Contingencies—									
(*a*) Stationery .. .	..	..	.	.	..	..		.	.
(*b*) Carriage of tents and records . ..	705	117	131	179	708	475	210	84	2,609
(*c*) Rents, rates and taxes.	478	31	295	226	1	48	94	34	1,207
(*d*) Pay of police guards .	.	..	..	.	..	.	.	.	.
(*e*) Official postage	512	362	186	563	1,012	794	459	353	4,241
(*f*) Sundries . ..	721	425	494	811	858	803	398	560	5,070
Total B —"Establishments" ..	51,846	22,100	12,062	26,091	30,890	28,891	12,930	16,507	2,01,317
Grand Total of Expenditure .	52,384	45,262	20,056	40,227	58,133	49,458	35,516	25,683	3,26,719

MADRAS,
3rd September 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts for the forest year 1893–94.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
B.—"Establishments."	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Brought forward, Total A. "Conservancy and Works"	60,533	30,323	27,472	11,890	55,805	23,456	47,201	21,223	4,801	2,82,704
I. Salaries—										
(*a*) Conservators ..	19,200	..	..	..	..	..	..	..	..	19,200
(*b*) Superior officers ..	12,040	7,800	9,417	9,123	5,990	11,100	13,800	11,415	..	80,685
(*c*) Subordinate forest and depôt establishments ..	3,295	6,569	9,487	2,958	9,529	10,784	11,552	3,818	1,118	59,110
(*d*) Office establishments	11,046	2,287	2,956	1,408	2,849	2,796	2,778	2,242	748	29,110
(*e*) Exchange compensation allowances.	2,452	957	773	1,246	601	1,177	1,691	627	..	9,524
II. Travelling allowances—										
(*a*) Conservators ..	2,511	..	..	..	..	..	..	..	..	2,511
(*b*) Superior officers ..	3,833	1,268	1,850	1,600	1,850	1,402	2,629	1,100	539	16,071
(*c*) Subordinate forest and depôt establishments ..	1,972	1,632	2,211	851	3,283	2,937	4,276	1,407	309	18,878
(*d*) Office establishments	1,897	223	464	288	709	352	710	406	157	5,206
III. Contingencies—										
(*a*) Stationery	..	..	..	..	..	..	..	..	..	..
(*b*) Carriage of tents and records ..	664	202	151	100	138	239	414	102	69	2,079
(*c*) Rents, rates and taxes	..	..	63	7	6	615	98	109	16	909
(*d*) Pay of police guards	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	557	258	424	355	1,136	796	1,288	398	144	5,356
(*f*) Sundries	895	547	375	9	719	537	400	258	193	3,933
Total B.—"Establishments"	60,362	21,743	28,171	17,945	26,810	32,735	39,631	21,882	3,293	2,52,572
Grand Total of Expenditure	1,20,895	52,066	55,643	29,835	82,615	56,191	86,832	43,105	8,094	5,35,276

MADRAS,
6th September 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Expenditure of the different districts for the forest year 1893-94.

Budget heads.	Direction	Nilgiris.	North Coimbatore.	South Coimbatore	Madura	Tinnevelly.	North Malabar	South Malabar	South Canara.	Total
B.—"*Establishments.*"	Rs	Rs.	Rs	Rs	Rs.	Rs	Rs.	Rs	Rs.	Rs
Brought forward, Total A "Conservancy and Works" . ..	9	44,021	24,755	53,006	32,514	43,620	17,011	33,998	24,700	2,73,634
I. Salaries—										
(*a*) Conservators ..	15,312		80	..				..	..	15,392
(*b*) Superior officers ..	4,422	10,480	11,324	5,245	9,781	7,500	5,229	9,600	6,805	70,386
(*c*) Subordinate forest and depôt establishments ..	3,658	8,197	5,624	8,600	8,888	7,695	6,020	4,621	6,004	59,307
(*d*) Office establishments	8,352	2,784	2,907	2,857	2,283	2,788	2,586	1,686	3,265	29,508
(*e*) Deputation and special allowances	1,898	1,322	1,297	618	943	662	411	..	788	7,939
II Travelling allowances—										
(*a*) Conservators ..	2,349		..	..	..					2,349
(*b*) Superior officers ..	1,260	1,586	2,302	1,429	1,708	2,185	732	1,210	1,248	13,660
(*c*) Subordinate forest and depôt establishments ..	2,354	2,073	1,779	2,408	2,548	1,917	1,520	1,179	2,097	17,875
(*d*) Office establishments	1,009	87	360	415	500	434	136	124	565	3,630
III. Contingencies—										
(*a*) Stationery ..	.	..	..	.	..	..	..	..	..	..
(*b*) Carriage of tents and records ..	465	..	234	159	231	321	58	..	415	1,883
(*c*) Rents, rates and taxes	480	104	172	89	14	70	.	5	60	994
(*d*) Pay of police guards	.	.	.	.	..	..	..	.	..	..
(*e*) Official postage ..	601	234	549	347	600	745	232	177	995	4,480
(*f*) Sundries . ..	2,262	523	603	91	167	820	352	159	402	5,379
Total B—"Establishments"	44,422	27,390	27,231	22,258	27,663	25,137	17,276	18,761	22,644	2,32,782
Grand Total of Expenditure	44,431	71,411	51,986	75,264	60,177	68,757	34,287	52,759	47,344	5,06,416

Madras,
12th October 1894.

(Signed) R MORRIS,
Deputy Accountant-General.

ANNUAL FORM NO. 64.

Forest Department, Madras Presidency.

GRAND TOTAL of the Presidency.

Budget heads. Receipts.	Rs.	Budget heads. Expenditure—A. Conservancy and Works.	Rs.	Budget heads. Expenditure—B. Establishments.	Rs.
I. Timber and other produce removed from the forests by Government Agency—		I. Timber and other produce removed from the forests by Government Agency—		Brought forward, Total, A. Conservancy and Works	6,81,740
(a) Timber ..	1,94,849	(a) Timber	71,512		
(b) Firewood and charcoal ..	1,36,808	(b) Firewood and charcoal	89,620	I. Salaries—	
(c) Bamboos ..	2,126	(c) Bamboos	367	(a) Conservators ..	50,785
(d) Sandal-wood ..	23,553	(d) Sandalwood ..	4,192	(b) Superior officers..	2,18,130
(e) Grass and other minor produce.	23,581	(e) Grass and other minor produce ..	11,967	(c) Subordinate forest and depôt establishments ..	1,58,917
II. Timber and other produce removed from the forests by consumers or purchasers—		II. Timber and other produce removed from the forests by consumers or purchasers	77,401	(d) Office establishments	81,229
(a) Timber ..	3,15,893	III. Confiscated drift and waif-wood	2,511	(e) Deputation and special allowances	24,661
(b) Firewood and charcoal ..	2,39,868	IV. Revenue from forests not managed by Government	..	II. Travelling allowances—	
(c) Bamboos ..	1,75,760	V. Rent of leased forests and payments to shareholders in forests managed by Government	18,084	(a) Conservators ..	7,692
(d) Grazing and fodder grass ..	2,66,891	VI. Live-stock, stores, tools and plant—		(b) Superior officers..	45,913
(e) Other minor produce ..	4,90,349	(a) Purchase of cattle ..	1,535	(c) Subordinate forest and depôt establishments ..	49,669
III. Confiscated drift and waif-wood	13,905	(b) Feed and keep of cattle	18,385	(d) Office establishments	13,531
IV. Revenue from forests not managed by Government	..	(c) Stores, tools and plant	7,440	III. Contingencies—	
V. Miscellaneous—		VII. Communications and buildings—		(a) Stationery ..	..
(a) Fines and forfeitures	1,758	(a) Roads and bridges..	41,421	(b) Carriage of tents and records ..	6,571
(b) Refunds ..	663	(b) Buildings	34,229	(c) Rents, rates and taxes	3,110
(c) Other sources ..	57,771	(c) Other works ..	3,604	(d) Pay of Police guards	..
		VIII. Demarcation, improvement and extension of forests—		(e) Official postage ..	14,077
		(a) Demarcation ..	49,571	(f) Sundries	14,382
		(b) Compensation for landsand rights..	6,207		
		(c) Surveys and working plans ..	79,225		
		(d) Plantations ..	49,364		
		(e) Protection from fire.	46,155		
		(f) Other works ..	49,490		
		IX. Miscellaneous—			
		(a) Refunds	9,430		
		(b) Law charges ..	1,495	Total, B. Establishments	6,86,671
		(c) Other charges ..	8,535		
Total, Receipts ..	19,43,715	Total, A. Conservancy and Works	6,81,740	Grand Total of Expenditure	13,68,411

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Northern Circle.

OUTSTANDINGS and Liabilities on account of contractors and disbursers for the forest year 1893–94.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Conservator, Northern Circle	..	2,231 13 7	2,231 13 7	160 3 0	2,124 10 2	2,284 13 2	52 15 7	..
Forest Settlement-officer, Kurnool	..	..	..	..	..	..	..	..
Forest School, Dehra Dun	..	120 0 0	120 0 0	..	120 0 0	120 0 0	..	..
Ganjám	..	29,491 1 9	29,491 1 9	3,220 5 9	28,430 7 5	31,650 13 2	2,159 11 5	..
Vizagapatam	..	13,524 9 0	13,524 9 0	536 15 1	14,380 1 10	14,917 0 11	1,392 7 11	..
Gódávari	..	29,468 4 1	29,468 4 1	2,229 5 5	29,276 9 2	31,505 14 7	2,037 10 6	..
Kistna	..	41,087 15 8	41,087 15 8	1,135 7 2	45,395 6 2	46,530 13 4	5,442 13 8	..
Kurnool	..	37,762 7 11	37,762 7 11	1,551 8 4	36,871 4 2	38,422 12 6	660 4 7	..
Bellary	..	23,138 10 6	23,138 10 6	228 3 2	23,294 2 1	23,522 5 3	383 10 9	..
Anantapur	..	14,867 14 7	14,867 14 7	150 13 8	15,036 3 2	15,187 0 10	319 2 3	..
Total ..	..	1,91,692 13 1	1,91,692 13 1	9,212 13 7	1,94,928 12 2	2,04,141 9 9	12,448 12 8	..

MADRAS,
30th August 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Central Circle.

Outstandings and Liabilities on account of contractors and disbursers for the forest year 1893–94.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Central Circle	..	1,229 6 0	1,229 6 0	69 0 2	1,193 2 5	1,262 2 7	32 12 7	..
Forest Settlement-officer, Salem	..	355 3 11	355 3 11	..	391 1 8	391 1 8	35 13 9	..
Do. Trichinopoly	..	113 11 7	113 11 7	..	131 9 7	131 9 7	17 14 0	..
Do. Nellore	..	333 12 4	333 12 4	17 13 6	345 0 4	362 13 10	29 1 6	..
Forest School, Dehra Dun	..	215 0 0	215 0 0	..	215 0 0	215 0 0	..	..
Nellore	..	42,296 15 0	42,296 15 0	3,269 10 8	40,344 8 11	43,614 3 7	1,317 4 7	..
Cuddapah	..	39,382 1 6	39,382 1 6	786 11 10	40,022 8 4	40,809 4 2	1,427 2 8	..
Chingeput	..	17,589 14 1	17,589 14 1	370 8 7	17,791 6 11	18,161 15 6	572 1 5	..
North Arcot	..	72,133 7 4	72,133 7 4	2,140 0 2	72,388 1 5	74,528 1 7	2,394 10 3	..
South Arcot	..	49,045 13 7	49,045 13 7	1,923 11 7	48,561 4 11	50,485 0 6	1,439 2 11	..
Salem	..	86,065 11 6	86,065 11 6	2,110 1 9	87,917 2 10	90,027 4 7	3,961 9 1	..
Trichinopoly	..	28,475 12 5	28,475 12 5	655 2 8	28,583 9 2	29,238 11 10	762 15 5	..
Tanjore	..	7,098 3 7	7,098 3 7	146 2 6	7,094 14 9	7,241 1 3	142 13 8	..
Total ..	..	3,44,335 0 10	3,44,335 0 10	11,488 15 5	3,44,979 7 3	3,56,468 6 8	12,133 5 10	..

MADRAS,
30th August 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Southern Circle.

Outstandings and Liabilities on account of contractors and disbursers for the forest year 1893–94.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Conservator, Southern Circle	..	7,123 15 10	7,123 15 10	51 9 4	7,118 9 6	7,170 2 10	46 3 0	..
Forest School, Dehra Dun	..	267 0 0	267 0 0	37 0 0	367 0 0	404 0 0	137 0 0	..
Nilgiris	..	44,063 5 6	44,063 5 6	1,376 10 8	44,870 15 0	46,247 9 8	2,184 4 2	..
North Coimbatore	..	28,560 8 8	28,560 8 8	1,290 15 4	28,252 12 2	29,543 11 6	983 2 10	..
South Coimbatore	..	36,258 7 5	36,258 7 5	1,703 1 7	36,281 6 4	37,984 7 11	1,726 0 6	..
Madura	..	58,147 3 6	58,147 3 6	4,168 14 2	54,248 8 8	58,417 6 10	270 3 4	..
Tinnevelly	..	55,530 9 6	55,530 9 6	2,752 6 2	55,130 13 0	57,883 3 2	2,352 9 8	..
North Malabar	..	10,115 5 2	10,115 5 2	1,491 3 5	10,029 3 6	11,520 6 11	1,405 1 9	..
South Malabar	..	11,911 6 5	11,911 6 5	937 4 5	11,843 12 6	12,781 0 11	869 10 6	..
South Canara	..	27,859 9 5	27,859 9 5	1,365 14 6	27,892 13 2	29,258 11 8	1,399 2 3	..
Total ..	..	2,79,837 7 5	2,79,837 7 5	15,174 15 7	2,76,035 13 10	2,91,210 13 5	11,373 6 0	..

MADRAS,
30th August 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

GRAND TOTAL for the Presidency.

	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
	..	8,15,865 5 4	8,15,865 5 4	35,876 12 7	8,15,944 1 3	8,51,820 13 10	35,955 8 6	..

Annual Form No. 66.

Forest Department, Madras Presidency, Northern Circle.

Revenue received and Outstandings on account of revenue for the forest year 1893–94.

District.	Particulars	Outstandings at commencement of year	Value of sales and other revenue during year.	Total	Amount realized during year.	Balance due to the department at end of year	Remarks
		Rs A P	Rs. A. P	Rs. A. P.	Rs A. P.	Rs. A. P.	
Direction	Timber and other produce ..	..	1,25,269 6 1	1,25,269 8 1	.. 1,25,023 8 1	.. 246 0 0	
Ganjám	Do. do. ..	0 2 0	24,551 3 1	24,551 3 1	24,551 3 1	..	
Vizagapatam	Do. do. ..	..	1,19,043 10 4	1,19,072 8 4	1,19,072 8 4	..	
Gódávari	Do do. ..	28 14 0	1,39,256 7 6	1,39,485 4 4	1,38,499 15 4 (a) 111 4 0	874 1 0	(a) Written off the accounts, *vide* Board's Proceedings, dated 27th October 1893, No. 622.
Kistna	Do. do. ..	228 12 10	95,402 10 2	95,402 10 2	95,390 0 2	12 10 0	
Kurnool	Do. do. ..	..	47,156 15 5	47,592 5 11	47,457 5 5 (b) 59 2 6	75 14 0	(b) Written off the accounts, *vide* Government Order, dated 19th April 1894, No. 1523.
Bellary	Do. do. ..	435 6 6	61,100 7 2	61,100 7 2	54,320 7 2	6,780 0 0	
Anantapur	Do do. ..	..	6,11,780 11 9	6,12,473 15 1	6,04,314 15 7 + 170 6 6	7,988 9 0	
	Total ..	693 3 4					

Madras,
4th September 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Central Circle.

Revenue received and Outstandings on account of revenue for the forest year 1893–94.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce..	..	70 9 9	70 9 9	70 9 9	..	
Nellore	Do. do. ..	..	98,516 14 7	98,516 14 7	98,238 2 7	278 12 0	
Cuddapah	Do. do. ..	234 9 7	1,39,249 13 7	1,39,484 7 2	1,39,481 2 7	3 4 7	
Chingleput	Do. do. ..	..	27,236 5 4	27,236 5 4	27,236 5 4	..	
North Arcot	Do. do. ..	2,109 11 1	1,76,349 0 10	1,78,458 11 11	1,46,188 12 0	32,269 15 11	
South Arcot	Do. do. ..	116 3 0	84,169 15 2	84,286 2 2	84,286 2 2	..	
Salem	Do. do. ..	1,192 1 3	1,87,588 10 7	1,88,780 11 10	1,88,123 5 4	657 6 6	
Trichinopoly	Do. do. ..	3,104 9 9	89,976 13 11	93,081 7 8	81,723 3 9 (a) 269 5 4	11,088 14 7	(a) 263-5-4. Written off the accounts, *vide* Government Order, dated 1st February 1894, No. 420. 6-0-0. Written off the accounts, *vide* Government Order dated 14th June 1894, No. 2319, Mis.
Tanjore	Do. do. ..	..	11,336 14 1	11,336 14 1	11,103 14 4	232 15 9	
	Total ..	6,757 2 8	8,14,495 1 10	8,21,252 4 6	7,76,451 9 10 + 269 5 4	44,531 5 4	

MADRAS,
4th September 1894.

(Signed) B. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Southern Circle.

Revenue received and Outstandings on account of revenue for the forest year 1893–94.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	..	42 0 0	42 0 0	42 0 0	..	
Nilgiris	Do. do. ..	895 4 3	52,832 1 4	53,727 5 7	52,767 3 10	960 1 9	
North Coimbatore ..	Do. do. ..	245 2 9	93,555 14 9	93,801 1 6	93,616 10 4	184 7 2	
South Coimbatore ..	Do. do. ..	375 15 4	93,285 13 1	93,661 12 5	92,857 4 0	804 8 5	
Madura	Do. do. ..	20,567 12 10	55,972 5 0	76,540 1 10	69,542 6 9	6,997 11 1	
Tinnevelly	Do. do. ..	1,128 12 4	85,849 3 0	86,977 15 4	85,486 11 1	1,491 4 3	
North Malabar	Do. do. ..	1,340 0 0	32,106 6 6	33,446 6 6	32,936 14 11	509 7 7	
South Malabar	Do. do. ..	..	82,357 11 2	82,357 11 2	82,357 11 2	..	
South Canara	Do. do. ..	3,118 12 0	53,533 11 1	56,652 7 1	53,342 3 1 (a) 884 6 0	2,425 14 0	(a) Written off the accounts, *vide* Government Order, dated 8th May 1894, No. 1824.
	Total ..	27,671 11 6	5,49,535 1 11	5,77,206 13 5	5,62,949 1 2 + 884 6 0	13,373 6 3	

MADRAS,
13th October 1894.

(Signed) R. MORRIS,
Deputy Accountant-General.

GRAND TOTAL for the Presidency.

Outstandings at commencement of year.	Value of sales and other revenues during the year.	Total.	Amount realized during year.	Balance due to the department at end of the year.
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
35,122 1 6	19,75,810 15 6	20,10,933 1 0	19,43,715 10 7 + 1,324 1 10	65,893 4 7

ANNUAL FORM No. 68.

Forest Department, Madras Presidency.

TREES felled by Government Agency during 1893–94.

Selection fellings.

Districts	Teak	Rose-wood	Vengai	Red-wood	Sal.	Iron-wood	Sandal-wood.	Miscella-neous	Total.
Northern Circle.	NO.	NO.	NO.	NO.	NO	NO	NO	NO	NO
Stock at beginning of the year ..	.	..	..	..	..	(a) 2	..	(a) 6	8
Ganjám	..	..	..	..	379	..	.	8	387
Vizagapatam	..	..	..	..	..	.	..	60	60
Gódávari	..		38	..	..	..	..	203	241
Kistna	..	..	..	..	..	..	..	125	125
Anantapur	2	..	..	..	..	.	..	11	13
Bellary	..	..	..	..	..	.	..	10	10
Kurnool	2	..	..	..	..	..	.	544	546
Total felled during the year ..	4	..	38	..	379	..	..	961	1,382
Total ..	4	..	38	..	379	2	..	967	1,390
Converted into logs, &c	4	..	38	..	379	..	..	961	1,382
Balance on hand at end of the year .	..	..	..	.	..	2	.	6	8
Central Circle									
Stock at beginning of the year ..	..	..	..	..	..	..	..	(b) 27	27
Nellore	..	..	..	..	..	..	..	40,666	40,666
Cuddapah	..	.	..	19	..	..	.	149	168
Chingleput	.	.	..	.	.	..	..	151	151
North Arcot	..	..	..	..	..	..	..	.	.
South do.	..	..	..	..	..	..	..	.	..
Tanjore	..	..	..	..	..	..	..	.	.
Trichinopoly	..	..	..	..	..	..	..	.	.
Salem	5	..	.	.	..	..	420	599	1,024
Total felled during the year .	5	..	..	19	..	..	420	41,565	42,009
Total ..	5	..	..	19	..	..	420	41,592	42,036
Converted into logs, &c.	5	..	..	19	..	..	420	41,572	42,016
Balance on hand at end of the year ..	..	..	..	..	..	..	..	20	20
Southern Circle.									
Stock at beginning of the year ..	22	18	10	..	..	..	..	80	130
Madura	2	3	399	..	..	..	.	29	433
Tinnevelly	..	..	..	..	..	..	..	129	129
North Coimbatore	..	..	..	..	..	..	..	.	..
South do.	156	2	3	..	..	11	..	727	899
Nilgiris	289	2	342	..	..	..	..	20,234	20,867
North Malabar	504	74	104	..	..	..	..	66	748
South do	89	75	14	..	..	.	..	891	1,069
South Canara	27	3	3	..		..	..	154	187
Total felled during the year ..	1,067	159	865	.	..	11	..	22,230	24,332
Total .	1,089	177	875	..	.	11	..	22,310	24,462
Converted into logs, &c.	1,080	(c) 169	863	..	..	11	..	(d) 22,152	24,275
Balance on hand at end of the year ..	9	8	12	..	..	..	..	158	187
Grand Total.									
Total stock at beginning of the year ..	22	18	10	.	..	2	..	(b) 113	165
Total felled during the year ..	1,076	159	903	19	379	11	420	64,756	67,723
Total ..	1,098	177	913	19	379	13	420	64,869	67,888
Total converted into logs, &c. ..	1,089	(c) 169	901	19	379	11	420	(d) 64,685	67,673
Total balance on hand at end of the year	9	8	12	..	..	2	..	184	215

(a) The Collector of Vizagapatam against which district the figures were shown in district returns as the balance of trees to be converted at the close of 1892-93 omits them in the return for 1893-94 and does not explain the cause.
(b) The figure entered in the return for 1892-93 as the balance at the end of that year was an error.
(c) Includes one tree found hollow and rejected in the South Coimbatore district.
(d) Includes four trees written off as being useless in the Tinnevelly district.

ANNUAL FORM No. 69.

Forest Department, Madras Presidency.

STATEMENT of Timber and other produce cut and collected by Government Agency during the year 1893-94.

—	TIMBER.								FUEL.	BAMBOOS.	SANDALWOOD.	MINOR PRODUCE.
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Iron wood.	Miscellaneous.	Total.				
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	M DS.
Stock of the circle at the beginning of the year ..	94	..	315	..	5,861	591	4,238	11,099	53,355	284	..	(a)24,180
Ganjám	..	..	..	..	13,180	..	898	14,078	..	800	..	..
Visagapatam	..	..	..	..	..	..	622	622	1,660	..	..	3,840
Gódávari	520	..	344	..	..	..	487	1,351	8,808	.	..	81
Kistna	..	..	..	..	..	..	584	584	41,272	..	..	328
Anantapur	4	..	..	..	..	..	110	114	..	..	..	189
Bellary	..	..	..	..	..	..	40	40	18,648	..	..	6,000
Kurnool	84	..	2,411	..	..	..	4,077	6,572	65,774	540	..	14
Collection during the year ..	608	..	2,755	..	13,180	..	6,818	23,361	136,162	1,340	..	10,452
Total ..	702	..	3,070	..	19,041	591	11,056	34,460	189,517	1,624	..	34,632
Sold locally in the forest ..	498	..	1,458	..	2,322	573	6,306	11,157	127,037	1,084	..	11,818
Used departmentally, wastage written off, &c.	4	..	..	..	1,581	18	948	2,551	1,472	200	..	21,957
Removed to sale depôts ..	200	..	1,612	..	12,834	..	3,391	18,037	..	340	..	158
Total disposal ..	702	..	3,070	..	16,737	591	10,645	31,745	128,509	1,624	..	33,933
Stock in the forest on 30th June 1894	..	..	..	..	2,304	..	411	2,715	61,008	..	..	699
Central Circle.												
Stock of the circle at the beginning of the year ..	..	..	..	..	..	..	(b)1,327	1,327	(c)147,015	..	..	16,724
Nellore	..	..	..	..	..	..	204	204	266,048	..	..	3,362
Cuddapah	..	..	..	40,032	..	..	1,772	41,804	2,010	2,384	..	799
Chingleput	..	..	..	..	..	..	..	..	2,360	..	..	269
North Arcot	..	..	..	4,124	..	..	1,609	5,733	966,800	45	..	..
South Arcot	..	..	..	..	..	..	1,382	1,382	70,515	..	4	..
Tanjore	..	..	..	..	..	..	20	20	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	375,461	..	..	..
Salem	5	..	..	..	..	..	1,337	1,342	189,645	2,360	785	80
Collection during the year ..	5	..	..	44,156	..	..	6,324	50,485	1,872,839	4,789	789	4,510
Total ..	5	..	..	44,156	..	..	7,651	51,812	2,019,854	4,789	789	21,234
Sold locally in the forest ..	..	..	..	3,357	..	..	3,079	6,436	1,241,389	45	4	7,194
Used departmentally, wastage written off, &c.	..	..	..	..	..	..	118	118	464	..	..	4
Removed to sale depôts ..	5	..	..	40,032	..	..	2,996	43,033	214,177	4,744	785	748
Total disposal ..	5	..	..	43,389	..	..	6,193	49,587	1,456,030	4,789	789	7,946
Stock in the forest on 30th June 1894	..	..	..	767	..	..	1,458	2,225	563,824	..	..	13,288
Southern Circle.												
Stock of the circle at the beginning of the year ..	32,592	8,716	3,860	..	..	..	69,960	115,128	307,782	5,660	13	1,341
Madura	1,539	25	4,832	..	..	..	3,550	9,946	138,462	9,458	..	..
Tinnevelly	421	..	..	..	..	..	14,626	15,047	318,803	56	..	5,158
North Coimbatore	71	38	227	..	..	..	465	801	60	60	2,426	78
South Coimbatore	10,823	40	131	..	..	475	51,179	62,648	149,862	250	2	2,945
Nilgiris	9,047	128	11,524	..	..	..	..	20,699	460,375	..	397	385
North Malabar	26,056	1,994	4,086	..	..	..	2,015	34,151	..	..	..	8
South Malabar	20,299	2,654	486	..	..	..	36,369	59,808	1,540	15,580	..	6
South Canara	1,056	..	47	..	..	..	9,769	10,872	24,242	3,712	..	1,045
Collection during the year ..	69,312	4,879	21,333	..	..	475	117,973	213,972	1,093,344	29,111	2,825	9,620
Total ..	101,904	13,595	25,193	..	..	475	187,933	329,100	1,401,126	34,771	2,838	10,961

Statement of Timber and other produce cut and collected by Government Agency, &c.—*cont.*

—	Timber.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sal.	Iron wood.	Miscellaneous.	Total.				
Southern Circle—cont.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Sold locally in the forest ..	45,557	7,467	18,958	..	..	..	48,754	120,736	636,604	12,877	299	10,389
Used departmentally, wastage written off, &c. ..	2,137	595	26	..	..	..	8,045	10,803	122,194	519	..	127
Removed to sale depôts ..	43,154	358	142	..	..	262	55,317	99,233	220,019	15,061	2,419	109
Total disposal ..	90,848	8,420	19,126	..	..	262	112,116	230,772	978,817	28,457	2,718	10,625
Stock in the forest on 30th June 1894	11,056	5,175	6,067	..	..	213	75,817	98,328	422,309	6,314	120	386
Grand Total.												
Stock of the circles at the beginning of the year ..	32,686	8,716	4,175	..	5,861	591	(*b*) 75,525	127,554	(*c*) 508,152	5,944	13	(*a*) 42,245
Collection during the year..	69,925	4,879	24,088	44,156	13,180	475	131,115	287,818	3,102,345	35,240	3,614	24,582
Total ..	102,611	13,595	28,263	44,156	19,041	1,066	206,640	415,372	3,610,497	41,184	3,627	66,827
Sold locally in the forest ..	46,055	7,467	20,416	3,357	2,322	573	58,139	138,329	2,005,030	14,006	303	29,401
Used departmentally, wastage written off, &c. ..	2,141	595	26	..	1,581	18	9,111	13,472	124,130	719	..	22,088
Removed to sale depôts ..	43,359	358	1,754	40,032	12,834	262	61,704	160,303	434,196	20,145	3,204	1,015
Total disposal ..	91,555	8,420	22,196	43,389	16,737	853	128,954	312,104	2,563,356	34,870	3,507	52,504
Stock in the forest on 30th June 1894	11,056	5,175	6,067	767	2,304	213	77,686	103,268	1,047,141	6,314	120	14,323

(*a*) Includes 2,496 maunds of grass omitted to be shown in the previous year's return.

(*b*) Excludes 371 cubic feet wrongly classed under miscellaneous during 1892–93.

(*c*) Includes 371 cubic feet do. do. do. and 11,368 cubic feet omitted in the return for 1892–93.

ANNUAL FORM No. 70.

Forest Department, Madras Presidency.

RECEIPTS and Issues of Timber and other produce in sale depôts during the year 1893–94 (from 1st July 1893 to 30th June 1894).

—	TIMBER.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Ironwood.	Miscellaneous.	Total.				
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the circle at sale depôts at the beginning of the year	18	..	..	..	4,415	52	142	4,627	..	..	..	56
Ganjám	..	..	..	..	12,834	..	28	12,862	..	..	..	..
Vizagapatam	..	..	..			..	..	..	..	..	..	..
Gódávari	140	..	..	..	..	..	412	552	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	..	..	..	..	..	..	156
Kurnool	60	..	1,612	..	..	..	2,951	4,623	..	340	..	2
Total received from forests into the sale depôts during the year	200	..	1,612	..	12,834	..	3,391	18,037	..	340	..	158
Receipts from one sale depôt into another ..	..	..	..	..	73	..	..	73	..	..	..	..
Quantity found in depôts in excess of original measurement in the forests	..	..	..	..	..	..	113	113	..	..	..	..
Total receipts, including previous year's stock ..	218	..	1,612	..	17,322	52	3,646	22,850	..	340	..	214
Sold from depôts	172	..	1,011	..	583	..	2,460	4,226	..	..	..	212
Removed from one sale depôt into another ..	..	..	..	..	73	..	..	73	..	..	..	..
Deduct excess by wrong measurement	..	..	..	..	..	7	..	7	..	..	..	..
Quantity used departmentally, wastage written off, &c.	..	..	..	..	..	40	192	232	..	340	..	2
Total ..	172	..	1,011	..	656	47	2,652	4,538	..	340	..	214
Balance at the end of the year	46	..	601	..	16,666	5	994	18,312	..	..	..	..
Central Circle.												
Stock of the circle at the sale depôts at the beginning of the year ..	..	..	..	1,008	..	..	(*a*) 222	1,230	(*b*) 28,544	750	604	4,464
Nellore	..	..	..	..	..	..	..	..	132,027	..	..	..
Cuddapah	..	..	..	40,032	..	..	1,769	41,801	140	2,384	..	748
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	..	70,966	..	..	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	8,384	..	..	..
Salem	5	..	..	..	..	..	1,227	1,232	2,660	2,360	785	..
Total received from forests into the sale depôts during the year	5	..	..	40,032	..	..	29,96	43,033	214,177	4,744	785	748
Receipts from one sale depôt into another ..	..	..	..	..	..	..	..	..	857	..	..	..
Quantity found in depôts in excess of original measurement in the forests	..	..	..	..	..	..	9	9	19,601	..	..	..
Total receipts, including previous year's stock ..	5	..	..	41,940	..	..	3,227	44,272	263,179	5,494	1,389	5,212
Sold from depôts	5	..	..	40,990	..	..	2,950	43,945	225,402	4,114	1,348	137
Removed from one sale depôt into another	..	..	..	..	..	..	..	..	857	..	..	..
Deduct excess by wrong measurement ..	..	..	..	..	..	..	..	..	2,425	..	..	..
Quantity used departmentally, wastage written off, &c.	..	..	..	..	..	..	2	2	301	..	..	4,137
Total ..	5	..	..	40,990	..	..	2,952	43,947	228,985	4,114	1,348	4,650
Balance at the end of the year	..	..	..	50	..	..	275	325	34,194	1,380	41	562

(*a*) Excludes 195 cubic feet wrongly included under timber in the return for 1892–93.
(*b*) Includes 195 cubic feet wrongly excluded under miscellaneous in the return for 1892–93.

Receipts and Issues of Timber and other produce in sale depôts during the year 1893-94—*cont.*

—	Timber.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Ironwood.	Miscellaneous.	Total.				
Southern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the circle at sale depôts at the beginning of the year	21,144	25	67	..	..	..	3,200	24,436	38,100	..	627	..
Madura	..	..	..	..	..	..	..	..	9,821	..	..	..
Tinnevelly	6	..	..	..	..	..	8,073	8,079	12,475	..	..	2
North Coimbatore	..	..	..	..	..	..	..	..	..	..	2,419	58
South Coimbatore	22,570	272	59	..	..	262	41,215	64,378	..	..	..	13
Nilgiris	..	..	..	..	..	..	..	..	196,183	..	..	36
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..
South Malabar	19,522	..	..	..	..	..	..	19,522	1,540	15,061	..	..
South Canara	1,056	86	83	..	..	..	6,029	7,254	..	..	..	..
Total received from forests into the sale depôts during the year	43,154	358	142	..	..	262	55,317	99,233	220,019	15,061	2,419	109
Receipts from one sale depôt into another	82	..	..	..	..	..	..	82	4,350	..	..	..
Quantity found in depôts in excess of original measurements in the forest	..	..	..	..	..	..	..	..	304	5	..	..
Total receipts including previous year's stock	64,380	383	209	..	..	262	58,517	123,751	262,773	15,066	3,046	109
Sold from depôts	63,307	238	207	..	..	..	25,786	90,138	216,828	15,066	561	15
Removed from one sale depôt into another	82	..	..	..	..	..	.	82	4,350	..	..	..
Deduct excess by wrong measurement	..	..	..	..	..	..	..	..	..	..	..	..
Quantity used departmentally, wastage written off, &c.	63	..	2	..	..	..	599	664	6,625	..	167	..
Total	64,052	238	209	..	..	..	26,385	90,884	227,803	15,066	728	15
Balance at the end of the year	328	145	..	..	..	262	32,132	32,867	34,970	..	2,318	94
Grand Total.												
Stock of the circles at sale depôts at the beginning of the year	21,162	25	67	1,008	4,415	52	3,564	30,293	66,644	750	1,231	4,520
Total received from forest into sale depôts during the year	43,359	358	1,754	40,032	12,834	262	61,704	160,303	434,196	20,145	3,204	1,015
Receipts from one sale depôt into another	82	..	..	..	73	..	..	155	5,207	..	..	..
Quantity found in excess of original measurement in forests	..	..	..	..	..	..	122	122	19,905	5	..	..
Total receipts including previous year's stock	64,603	383	1,821	41,040	17,322	314	65,390	190,873	525,952	20,900	4,435	5,535
Sold from depôts	64,084	238	1,218	40,990	583	..	31,196	138,309	442,230	19,180	1,909	414
Removed from one sale depôt into another	82	..	..	..	73	..	..	155	5,207	..	..	..
Deduct excess by wrong measurement	..	..	..	..	..	7	..	7	2,425	..	..	..
Quantity used departmentally, wastage written off, &c.	63	..	2	..	..	40	793	898	6,926	340	167	4,465
Total	64,229	238	1,220	40,990	656	47	31,989	139,369	456,788	19,520	2,076	4,879
Stock on 30th June 1894.	374	145	601	50	16,666	267	33,401	51,504	69,164	1,380	2,359	656

ANNUAL FORM No. 71.

Forest Department, Madras Presidency.

SALES of timber and other produce cut and collected by Government Agency during the year 1893–94 (from 1st April 1893 to 30th June 1894).

District	Timber.														Total, Timber			
	Teak		Rosewood		Vengai		Redwood		Sal		Iron-wood		Miscellaneous.		From depôt.		From forest	
	From depôt	From forest	From depôt.	From forest	From depôt	From forest	From depôt	From forest	From depôt	From forest	From depôt	From forest	From depôt	From forest	Quantity	Amount	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle	C. FT	C. FT	C. FT	C. FT	C. FT	C FT	C. FT	C FT	C FT	C. FT	C FT	C FT	C. FT.	C FT.	C FT	RS	C. FT	RS.
Ganjám	..	..	..	..	..	..	..	..	583	2,322	..	..	22	834	605	333	3,156	354
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	* 1,000
Gódávari	158	468	..	..	..	344	..	..	..	..	..	573	412	3,518	570	20	4,903	551
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	584	..	..	584	11
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool	14	30	..	..	1,011	1,114	..	..	..	..	..	..	2,026	1,370	3,051	2,563	2,514	1,875
Total	172	498	..	..	1,011	1,458	..	..	583	2,322	..	573	2,460	6,306	4,226	2,916	11,157	3,791
Central Circle.																		
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	43	..	..	43	16
Cuddapah	..	..	..	..	..	..	40,032	..	..	..	..	..	1,723	2	41,755	12,004	2	3
Chingleput	..	..	..	..	..	..	958	3,357	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	1,613	958	..	4,970	2,278
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	1,379	..	..	1,379	509
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..	20	167
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem	5	..	..	..	..	..	..	..	..	..	..	..	1,227	22	1,232	966	22	3
Total	5	..	..		..		40,990	3,357	..	..	..	..	2,950	3,079	43,945	12,970	6,436	2,325
Southern Circle																		
Madura	..	1,028	..	13	..	4,951	..	..	..	..	..	..	..	3,535	..	..	9,527	6,054
Tinnevelly	6	415	..	..	..	..	..	..	..	..	..	..	6,806	2,465	6,812	7,078	2,880	681
North Coimbatore	..	71	..	38	..	227	..	..	..	..	..	..	..	465	..	..	801	76
South Coimbatore	41,005	39	184	252	59	278	..	..	..	..	..	..	10,678	962	51,926	50,544	1,531	4[illegible]9
Nilgiris	..	9,878	..	1,819	..	9,772	..	..	..	..	..	..	224	55	224	81	21,524	12,276
North Malabar	..	27,942	..	1,431	..	3,730	..	..	..	..	..	..	..	390	..	..	33,493	22,582
South Malabar	21,701	6,184	..	3,914	..	..	..	..	..	..	..	..	..	38,473	21,701	29,978	48,571	34,374
South Canara	1,195	..	54	..	148	..	..	..	..	..	..	..	8,078	2,409	9,475	8,151	2,409	318
Total	63,907	45,557	238	7,467	207	18,958	..	..	..		..	..	25,786	48,754	90,138	96,832	120,736	76,830

* Amount received as advance

Sales of timber and other produce cut and collected by Government Agency during the year 1893–94, &c.—*cont.*

District.	Fuel.				Bamboos.				Sandalwood.				Minor produce.			
	From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Ganjám	..	..	..	..	..	..	800	3	..	..	..	..	..	..	..	..
Vizagapatam	..	..	1,360	100	..	..	..	..	..	..	..	..	..	..	4,032	452
Gódávari	..	..	48,231	2,912	..	..	..	..	..	..	..	..	..	..	1,520	995
Kistna	..	..	432	439	..	..	..	..	..	..	..	..	..	..	203	65
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	212	431	53	80
Bellary	..	..	30,008	675	..	..	..	..	..	..	..	..	..	..	6,000	1,200
Kurnool	..	..	47,006	777	..	..	284	..	..	..	..	..	..	..	10	9
Total ..	..	..	127,037	4,903	..	..	1,084	3	..	..	..	..	212	431	11,818	2,801
Central Circle.																
Nellore	146,897	24,064	63,425	9,908	..	..	..	..	..	..	..	..	..	..	5,898	4,192
Cuddapah	140	7	17,425	323	1,684	77	..	..	..	..	..	..	187	155	51	27
Chingleput	..	..	2,360	291	..	..	..	..	..	..	..	..	..	..	1,165	† ..
North Arcot	66,786	4,474	603,898	14,031	70	21	45	7	..	..	..	343	..	..	..	..
South Arcot	..	..	91,116	7,116	..	..	..	..	73	85	4	29	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	8,919	605	276,240	17,891	..	..	..	..	..	..	..	..	..	..	..	67
Salem	2,660	232	186,925	18,424	2,360	78	..	..	1,275	11,985	..	..	..	..	80	5
Total ..	225,402	29,382	1,241,389	67,984	4,114	176	45	7	1,348	12,070	4	372	187	155	7,194	4,291
Southern Circle.																
Madura	9,867	923	78,625	9,622	..	..	8,849	291	..	..	..	..	..	..	..	..
Tinnevelly	12,475	734	305,878	6,470	..	..	56	..	..	..	..	..	2	100	5,155	42
North Coimbatore	..	..	60	†	..	..	60	..	561	9,030	3	4	..	..	6	8
South Coimbatore	..	..	129,459	1,802	..	..	250	20	..	..	2	2	13	262	3,364	7,607
Nilgiris	192,946	16,856	97,203	3,777	..	..	..	..	..	..	294	2,070	..	..	331	68
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	45
South Malabar	1,540	100	..	..	15,066	1,597	..	..	..	..	..	..	..	..	77	322
South Canara	..	..	25,379	2,091	..	..	3,662	28	..	..	..	..	..	..	1,450	7,641
Total ..	216,828	18,613	636,504	23,762	15,066	1,597	12,877	339	561	9,030	299	2,076	15	362	10,389	15,733

* Form No. 71 of the district shows no sale, but the amount of revenue is entered from Form No. 64 furnished by the Accountant-General.
† The summary of revenue (Form No. 64) does not show any revenue.

Sales of timber and other produce cut and collected by Government Agency, &c.—*cont.*

	Quantity sold.			Amount of sales.			Amount actually realized.
	From depôt.	From forest.	Total.	From depôt.	From forest.	Total.	
				Rs.	Rs.	Rs.	Rs.
Northern Circle.			Abstract.				
I (*a*) Timber .. .. C.ft.	4,226	11,157	15,383	2,916	3,791	6,707	6,461
(*b*) Fuel .. .. .. ,,	..	127,037	127,037	..	4,903	4,903	4,903
(*c*) Bamboos .. .. No.	..	1,084	1,084	..	3	3	3
(*d*) Sandalwood .. .. C.ft.	..	..	..	..	..	..	..
(*e*) Minor produce .. Mds.	212	11,818	12,030	431	2,801	3,232	3,232
Central Circle.							
I (*a*) Timber .. .. C.ft.	43,945	6,436	50,381	12,970	2,825	15,795	16,276
(*b*) Fuel .. .. .. ,,	225,402	1,241,389	1,466,791	29,382	67,984	97,366	92,335
(*c*) Bamboos .. .. No.	4,114	45	4,159	176	7	183	179
(*d*) Sandalwood .. .. C.ft.	1,348	4	1,352	12,070	372	12,442	12,447
(*e*) Minor produce .. Mds.	187	7,194	7,381	155	4,291	4,446	4,445
Southern Circle.							
I (*a*) Timber .. .. C.ft.	90,138	120,736	210,874	95,832	76,830	1,72,662	1,72,112
(*b*) Fuel .. .. .. ,,	216,828	636,604	853,432	18,613	23,762	42,375	39,570
(*c*) Bamboos .. .. No.	15,066	12,877	27,943	1,597	339	1,936	1,944
(*d*) Sandalwood .. .. C.ft.	561	299	860	9,030	2,076	11,106	11,106
(*e*) Minor produce .. Mds.	15	10,389	10,404	362	15,733	16,095	15,904
			Grand Total.				
I (*a*) Timber .. .. C.ft.	138,309	138,329	276,638	1,11,718	83,446	1,95,164	1,94,849
(*b*) Fuel .. .. .. ,,	442,230	2,005,030	2,447,260	47,995	96,649	1,44,644	1,36,808
(*c*) Bamboos .. .. No.	19,180	14,006	33,186	1,773	349	2,122	2,126
(*d*) Sandalwood .. .. C.ft.	1,909	303	2,212	21,100	2,448	23,548	23,553
(*e*) Minor produce .. Mds.	414	29,401	29,815	948	22,825	23,773	23,581
Grand Total of sales during the year both from depôts and forests						389,251	3,80,917
Add outstandings due from previous year as per Form No. 66 ..						4,905	..
Total ..						3,94,156	..
Deduct amount realized as per Form No. 64						3,80,917	..
Balance outstanding on 30th June 1894 ..						13,239	..

Annual Form No. 72-A.

Forest Department, Madras Presidency.

Timber and other produce cut, collected and removed by consumers or purchasers during 1893–94 (from 1st April 1892 to 30th June 1893).

District.	Timber.	Firewood and charcoal.	Bamboos.	Money value of sales.											
				Timber.		Firewood and charcoal.		Bamboos.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
Northern Circle.	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjám	477,808	626,648	2,119,661	1,01,636	1,01,636	8,145	8,145	7,493	7,493	2,801	2,801	3,634	3,634	1,23,709	1,23,709
Vizagapatam	129,730	298,360	633,800	4,127	4,127	7,080	7,080	6,856	6,856	190	190	3,835	3,835	22,088	22,088
Gódávari	245,455	446,181	9,550,050	38,591	38,591	8,302	8,302	55,811	55,840	3,359	3,359	4,795	4,795	1,10,858	1,10,887
Kistna	483,197	614,520	282,650	25,635	25,657	16,006	15,360	728	728	74,012	74,087	16,527	16,319	1,32,908	1,32,151
Anantapur	43,650	128,520	7,753	6,945	6,945	2,627	2,627	145	145	2,459	2,459	47,651	40,871	59,827	53,047
Bellary	101,311	211,382	82,650	6,197	6,197	5,099	5,099	1,648	1,648	2,920	2,920	29,571	28,871	44,435	44,785
Kurnool	362,599	293,979	4,071,400	32,125	32,125	7,803	7,803	16,508	16,508	11,090	11,077	19,414	19,414	86,940	86,927
Total ..	1,843,750	2,618,590	16,747,964	2,15,256	2,15,278	55,062	54,416	89,189	89,218	96,831	96,893	1,24,427	1,17,739	5,80,765	5,73,544
Central Circle.															
Nellore	117,975	108,025	2,804	9,562	9,562	4,173	4,173	90	90	15,584	15,584	30,556	30,556	59,965	59,965
Cuddapah	123,057	1,253,079	261,590	13,079	13,079	16,973	16,973	6,567	6,567	10,426	10,426	77,154	77,154	1,24,199	1,24,199
Chingleput	45,315	199,693	16,768	4,715	4,715	5,919	5,919	230	230	5,785	5,785	9,192	9,192	25,841	25,841
North Arcot	14,111	52,438	2,436,672	2,916	2,916	18,629	16,954	38,159	22,633	42,782	42,782	42,342	32,280	1,44,828	1,17,565
South do.	13,127	478,865	197,696	992	992	20,812	20,812	3,089	3,089	15,173	15,173	28,741	28,741	68,807	68,807
Tanjore	15,870	246,434	18,857	1,025	1,025	4,960	4,960	254	254	482	482	4,294	4,079	11,015	10,800
Trichinopoly	126,898	448,373	618,301	9,156	9,156	10,672	10,829	3,740	3,740	5,397	5,442	40,131	33,397	69,096	62,564
Salem	214,155	396,137	3,476,415	21,651	22,171	34,495	34,495	29,020	29,020	19,654	19,654	46,864	46,874	1,51,684	1,52,214
Total ..	670,508	3,382,984	7,029,103	63,096	63,616	1,16,633	1,15,115	81,149	65,623	1,15,283	1,15,328	2,79,274	2,62,273	6,55,435	6,21,955
Southern Circle.															
Madura	16,272	101,591	79,808	13,116	13,116	9,672	5,672	1,253	1,253	3,075	3,075	14,949	31,193	38,065	54,309
Tinnevelly	6,721	1,473,665	31,872	1,687	1,687	41,696	42,166	424	498	5,776	5,311	18,988	18,412	68,571	68,074
North Coimbatore ..	50,904	368,892	625,792	7,175	7,175	8,253	8,288	9,780	9,780	27,595	27,588	27,054	27,087	79,857	79,918
South do.	20,422	696,324	269,440	4,907	4,907	9,317	9,317	4,209	4,209	6,286	6,286	5,158	5,158	29,877	29,877
Nilgiris	3,467	20,086	194,806	769	769	1,043	1,043	2,553	2,553	7,420	7,420	649	649	12,434	12,434
North Malabar	14,051	1,184	32,585	4,224	4,224	25	25	479	479	1,226	1,226	1,093	2,323	7,047	8,277
South do.	59,812	147,144	121,483	3,885	3,885	2,725	2,725	1,293	1,293	79	79	2,116	2,116	10,098	10,098
South Canara	3,651	189,056	46,745	1,236	1,236	1,041	1,041	854	854	3,685	3,685	23,590	23,399	30,406	30,215
Total ..	175,290	2,997,942	1,402,531	36,999	36,999	69,772	70,277	20,845	20,919	55,142	54,670	93,597	1,10,337	2,76,355	2,93,202
Grand total ..	26,89,548	8,999,516	25,179,598	3,15,351	3,15,892	2,41,467	2,39,808	1,91,183	1,75,760	2,67,256	2,66,891	4,97,298	4,90,349	15,12,555	14,88,701

Add outstanding due from previous year as per Form No. 66		30,095
	Total ..	15,42,650
Deduct amount of outstanding written off, &c.		1,324
Do. realized during the year as per Form No. 64		14,88,701
Balance outstanding on 30th June 1893 as per Form No. 66		52,625

ANNUAL FORM No. 72-B.

Forest Department, Madras Presidency.

TIMBER and other Produce confiscated and sold during the year 1893–94.

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realised.
	Quantity in cubic feet	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
Northern Circle.		RS.		RS.		RS.	RS.	RS.	RS.
Ganjám	1,538	355	178	6	831	6	12	379	379
Vizagapatam ..	220	44	1,409	26	..	..	19	89	89
Gódávari	8,443	3,018	24,012	493	..	..	..	3,511	3,511
Kistna	2,117	371	500	21	2,000	10	44	446	446
Anantapur	144	13	162	6	..	..	34	53	53
Bellary	103	10	3,580	209	..	..	..	219	219
Kurnool	3,191	2,266	1,802	26	7,700	39	14	2,345	2,345
Total ..	15,756	6,077	31,643	787	10,531	55	123	7,042	7,042
Central Circle.									
Nellore	540	135	640	27	..	..	..	162	162
Cuddapah	1,261	280	135	8	104	4	123	415	413
Chingleput	153	29	116	5	..	..	30	64	64
North Arcot ..	1,333	635	311	31	643	9	8	683	683
South do. ..	3,001	190	11,968	748	256	4	66	1,008	1,008
Tanjore	153	72	103	41	..	..	..	113	113
Trichinopoly ..	86	9	274	10	2,734	44	17	80	80
Salem	410	828	225	18	1,925	24	1	871	871
Total ..	6,937	2,178	13,772	888	5,662	85	245	3,396	3,394
Southern Circle.									
Madura	15,180	94	9,840	32	224	3	15	144	144
Tinnevelly	44	11	6,004	170	280	1	31	213	213
North Coimbatore ..	544	207	61	4	512	8	103	322	322
South do. ..	65	9	245	16	640	10	102	137	137
Nilgiris	562	318	49	5	..	..	..	323	323
North Malabar ..	..	..	..	..	..	..	3	3	3
South do. ..	3,733	1,586	..	..	..	..	3	1,589	1,589
South Canara ..	2,409	437	608	38	768	12	251	738	738
Total ..	22,537	2,662	16,807	265	2,424	34	508	3,469	3,469
Grand Total ..	45,230	10,917	62,222	1,940	18,617	174	876	13,907	13,905
Deduct amount realized during the year as per Form No. 66								13,905	
Balance outstanding on 30th June 1894 ..								2	

ANNUAL FORM No. 73-A.

Forest Department, Madras Presidency.

ABSTRACT showing the Value of Timber and other produce at sale depôts for the year 1893-94.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Northern Circle.			Rs.			Rs.	Rs.	Rs.
Ganjám ..	Sal logs	209	4,320	1,620	1,030	16,571	6,214	4,594	..
	,, sleepers	27	94	54	27	94	54	..	..
	,, slabs	69	7	1	6	1	1	..	..
	Miscellaneous	1	16	2	2	28	4	2	..
	Total, Timber ..	..	4,437	1,677	..	16,694	6,273	4,596	..
Vizagapatam ..	Ironwood	2	40	40	..	..	..	..	40
	Miscellaneous	6	120	120	..	..	..	..	120
	Total, Timber ..	..	160	160	..	..	..	..	160
Gódávari ..	Ironwood	..	18	27	..	5	7	..	20
	Teak	..	12	18	..	..	..	..	18
	Total, Timber ..	..	30	45	..	5	7	..	38
Anantapur ..	Minor produce	Mds. 56	..	139	..	..	..	..	139
Kurnool ..	Teak	..	..	..	6	46	93	93	..
	Vengai	..	..	..	993	601	543	543	..
	Miscellaneous	..	..	..	137	966	724	724	..
	Total, Timber ..	..	..	..	..	1,613	1,360	1,360	..
	Central Circle.								
Nellore ..	Firewood	..	19,294	2,267	..	4,123	645	..	1,622
Cuddapah ..	Redwood roots and stumps.	..	..	..	..	50	11	11	..
	Miscellaneous	..	245	40	..	241	79	39	..
	Total, Timber ..	..	245	40	..	291	90	50	..
	Bamboos	..	..	..	700	..	49	49	..
	Minor produce	Mds. 4,464	..	585	Mds. 562	..	354	..	231
North Arcot ..	Redwood	..	958	240	..	..	..	..	240
	Miscellaneous timber ..	..	220	31	..	25	25	..	6
	Total, Timber ..	..	1,178	271	..	25	25	..	246
	Firewood	..	6,095	1,373	..	30,071	2,179	806	..
	Bamboos	750	..	15	..	680	127	112	..
South Arcot ..	Sandalwood roots ..	..	73	359	..	..	..	..	359
	Miscellaneous timber ..	..	2	1	..	..	..	..	1
Trichinopoly ..	Firewood	..	2,960	182	..	..	..	..	182
Salem	Sandalwood	..	531	6,271	..	41	610	..	5,662
	Miscellaneous timber ..	..	..	..	..	9	9	9	..
	Southern Circle.								
Madura ..	Firewood	..	10,435	1,169	..	4,713	514	..	..
	Charcoal	..	686	58	..	..	..	..	1,713

Abstract showing the Value of Timber and other produce at sale depôts for the year 1893–94—*cont.*

District	Description of timber or produce	On hand at commencement of the year			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value	In favour of the year.	Against the year.
	Southern Circle—cont			Rs			Rs.	Rs	Rs.
Tinnevelly ..	Miscellaneous timber ..	..	385	191	..	1,213	965	774	..
North Coimbatore	Sandalwood billet and chips	..	627	16,441	..	2,318	25,603	9,162	..
	Minor produce	..	..	..	Mds. 58	..	232	232	..
South Coimbatore.	Teak	..	18,498	27,888	..	..	..	..	27,888
	Rosewood	..	..	..	3	88	147	147	..
	Ironwood	..	..	..	9	262	94	94	..
	Miscellaneous	..	303	150	893	30,700	11,521	11,371	..
	Total, Timber ..	..	18,801	28,038	..	31,050	11,762	..	16,276
Nilgiris ..	Miscellaneous timber ..	..	251	219	..	7	6	..	213
	Firewood and charcoal ..	..	26,979	1,940	..	30,257	2,190	250	.
	Minor produce	..	..	..	Mds. 36	..	36	36	..
South Malabar ..	Teak	..	2,179	3,268	..	.	..	..	3,268
South Canara ..	Teak	..	467	759	10	328	369	.	390
	Rosewood	..	25	27	3	57	91	64	..
	Vengai	..	67	60	..	..	..	.	60
	Miscellaneous	..	2,261	2,168	9	212	185	..	1,983
	Total, Timber ..	..	2,820	3,014	..	597	645	..	2,369

ABSTRACT.

Northern Circle								
Timber	..	4,627	1,882	..	18,312	7,640	5,758	..
Minor produce	Mds 56	..	139	..	..	..	..	139
Central Circle.								
Timber	..	1,425	312	..	325	124	..	188
Sandalwood	..	604	6,630	..	41	610	..	6,020
Firewood	..	28,349	3,822	..	34,194	2,824	..	998
Bamboos	750 Mds	..	15	1,380 Mds.	..	176	161	..
Minor produce . ..	4,464	..	585	562	..	354	..	213
Southern Circle								
Timber	..	24,436	34,730	..	32,867	13,378	..	21,352
Sandalwood	..	627	16,441	..	2,318	25,603	9,162	..
Firewood	..	38,100	3,167	..	34,970	2,704	..	463
Minor produce	..	..	..	Mds 94	..	268	268	..
GRAND TOTAL								
Timber	..	30,488	36,924	..	51,504	21,142	..	15,782
Sandalwood	..	1,231	23,071	..	2,359	26,213	3,142	..
Firewood	..	66,449	6,989	..	69,164	5,528	..	1,461
Bamboos	750 Mds.	..	15	1,380 Mds	..	176	161	..
Minor produce	4,520	..	724	656	..	622	..	102

ANNUAL FORM No. 73-B.

Forest Department, Madras Presidency.

ABSTRACT showing the Value of Live-stock, Stores, Tools and Plant for the year 1893–94.

Districts.	Surveying, &c., Instruments				Tools				Machinery				Furniture			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	24	402	24	402	..	..	..	..	..	..	..	..	109	1,790	109	1,790
Ganjám	47	852	47	852	189	280	630	667	..	..	..	..	58	422	78	528
Vizagapatam	18	343	20	356	75	65	164	206	..	..	..	..	40	286	45	371
Gódávari	56	534	56	534	602	1,109	648	1,244	..	..	..	..	85	658	85	658
Kistna	60	739	66	1,032	416	451	465	594	..	..	..	..	67	585	77	689
Anantapur	44	247	44	* 238	149	614	223	825	..	..	..	..	78	470	80	* 466
Bellary	37	137	65	162	267	437	268	433	..	..	..	..	38	232	38	* 220
Kurnool	55	507	57	476	572	719	727	1,085	..	..	..	..	58	456	102	690
Total ..	341	3,761	379	4,052	2,270	3,675	3,125	5,054	..	..	..	..	533	4,899	614	5,412
Central Circle.																
Direction	19	249	19	249	..	..	..	..	..	..	..	..	51	186	51	186
Nellore	61	404	‡ 52	367	473	1,211	473	* 1,111	7½ miles, 15	34,802	9¾ miles, 21	‖ 45,735	76	423	76	423
Cuddapah	103	690	202	709	474	1,396	472	* 1,391	3½ miles	13,967	3½ miles	13,967	114	813	116	816
Chingleput	23	380	21	* 368	393	733	393	733	..	..	..	..	81	762	79	* 756
North Arcot	21	* 632	21	* 602	1,360 cwt. 32·94	2,513	1,369	* 2,323	2½ miles, 48	11,021	‖ 13	88	117	547	132	* 544
South Arcot	118	1,415	118	1,415	919	662	995	706	7	271	7	271	170	1,550	178	1,590
Tanjore	23	† ..	25	† ..	210	16	* 157	29	..	..	..	..	46	17	79	187
Trichinopoly	9	412	9	412	1,037	1,232	1,040	1,233	..	..	..	..	66	518	75	579
Salem	108	521	121	1,219	1,145	2,167	1,448	2,604	2	21	2	21	321	1,481	325	1,487
Total ..	485	4,703	588	5,341	6,011 cwt. 32·94	9,930	6,347	10,130	72 miles, 13¼	60,032	43 miles, 13¾	60,082	1,042	6,297	1,111	6,568

* Collectors do not explain the variation between these and previous years' figures.
‡ Nine rendered unserviceable.
† Value not given.
‖ Value of 2½ miles of tramway transferred from North Arcot has been included.
§ Tram materials transferred to Nellore.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1893–94—*cont.*

Districts	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year		On hand at commencement of the year.		On hand at end of the year		On hand at commencement of the year.		On hand at end of the year		Difference in value	
	Number.	Value.	Number	Value	Number	Value.	Number.	Value.	Number	Value	Number.	Value.	Number.	Value	Number	Value	In favour of the year	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle		Rs		Rs		Rs		Rs		Rs		Rs		Rs		Rs	Rs.	Rs
Direction	..	..	.		..	..	..	..	27	121	..		160	2,313	133	2,192	..	121
Ganjám	20	11,148	21	14,834	‖ 2	3,000	† 1	1,500	17	183	* ..	.	333	15,885	777	18,381	2,496	..
Vizagapatam	16	855	18	1,035	.	..	..	..	1	10	1	10	150	1,559	248	1,978	419	..
Gódávari	26	4,261	29	5,256	‡ 1	1,500	..	..	§ 365	§ 2,538	467	3,347	1,135	10,600	1,285	11,039	439	..
Kistna	48	8,429	51	8,576	.	..	..	..	6	2,460	6	2,460	597	12,664	665	13,351	687	..
Anantapur	13	12,567	13	12,800	.	.	.	..	..	..	..	..	284	13,898	360	14,329	431	..
Bellary	4	1,305	14	2,652	..	..	..	..	. 26	89	26	* 82	372	2,200	411	3,549	1,349	* ..
Kurnool	53	19,932	* 52	23,200	.	..	..	..	16	70	16	* 63	754	21,684	954	25,514	3,830	..
Total ..	180	58,497	198	68,353	3	4,500	1	1,500	458	5,471	516	5,962	3,785	80,803	4,833	90,333	9,530	..
Central Circle.																		
Direction	..	..	..	.	..	..	.	..	19	40	..	..	89	475	70	435	..	40
Nellore	9	2,079	9	2,079	..	..	..	..	240	5,154	240	5,154	874 miles 7½	* 44,073	871 miles 9½	54,869	10,796	..
Cuddapah	104	18,982	106	19,024	2	37	2	37	.	.	..		797 miles 3½	35,885	898 miles 3½	35,944	59	..
Chingleput	17	3,288	* 16	3,273	..	..	.	..	31	27	31	27	545	5,190	540	5,157	..	33
North Arcot	37	6,725	38	7,941	.	..	.	..	..	.	..	..	1,583 miles 2½ cwt. 32·94	21,438	1,573	11,498	..	9,940
South Arcot	13	7,650	16	8,637	.	..	.	.	584	1,612	584	1,612	1,811	13,160	1,898	14,231	1,071	..
Tanjore	5	826	5	* 836	.	..	..	..	1	60	*	* 23	285	419	266	575	156	* ..
Trichinopoly . ..	10	2,062	* 9	1,832	.	..	..	..	229	368	238	386	1,351	4,592	1,371	4,442	.	150
Salem	17	12,886	17	12,886	..	..	..	..	2	14	2	14	1,595	17,090	1,915	18,231	1,141	.
Total ..	212	53,998	216	56,008	2	37	2	37	1,106	7,275	1,095	7,216	8,930 miles 13½ cwt. 32·94	1,42,322	9,402 miles 13½	1,45,382	3,06	..

* Collectors do not explain the variation between these and previous years' figures
† Transferred from another district.
‡ Died during 1893–94
§ Correct figures as now reported.
‖ Sold

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1893–94—*cont.*

Districts.	Surveying, &c., Instruments				Tools				Machinery				Furniture.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	65	641	75	750	1	30	1	30	..	..	..	..	90	682	94	705
Madura	56	823	60	1,007	606	5,295	643	5,436	..	..	..	..	144	1,314	188	1,787
Tinnevelly	62	960	60	* 920	840	1,237	728	2,027	14	178	14	178	310	1,866	335	1,977
North Coimbatore	37	630	37	699	522	1,251	426	1,195	..	..	..	..	160	1,383	166	1,412
South do.	50	59	58	1,000	† 439	† 337	370	306	3,206	42,447	3,289	42,677	171	49	239	1,235
Nilgiris	26	262	26	262	651	1,270	784	1,472	4	1,820	4	1,820	74	540	74	540
North Malabar	44	1,257	46	* 701	68	902	73	* 792	..	..	..	..	..	..	..	..
South do.	13	409	13	409	472	513	532	588	10	60	10	60	40	395	40	395
South Canara	42	577	85	870	407	544	498	666	..	..	..	..	112	1,018	140	1,195
Total ..	395	5,618	460	6,618	4,006	11,379	4,055	12,512	3,234	44,505	3,317	44,735	1,101	7,247	1,276	9,246
Grand Total ..	1,221	14,082	1,427	16,011	12,287 cwt. 32·94	24,984	13,527	27,696	3,306 miles 13½	1,04,587	3,360 miles 13½	1,04,917	2,676	18,443	3,001	21,226

Collectors do not explain the variation between these and previous years' figures.

† Correct figures as now reported.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1893–94—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	..	..	..	..	..	..	..	..	139	364	637	554	295	1,717	807	2,039	322	..
Madura	91	24,252	97	26,974	..	..	..	..	..	..	..	..	897	31,684	988	35,204	3,520	..
Tinnevelly	94	16,556	98	18,383	..	..	..	..	..	..	..	..	1,320	20,797	1,235	23,485	2,688	..
North Coimbatore ..	42	9,252	51	13,020	..	..	..	..	148	291	253	472	910	12,807	933	16,798	3,991	..
South do. ..	29	157	40	25,457	7	7,700	10	10,200	† 367	† 612	• 277	572	† 4,269	† 51,361	4,283	81,447	30,086	..
Nilgiris	48	6,203	48	6,203	5	2,600	5	2,600	11	80	15	128	† 819	† 12,775	956	13,025	250	..
North Malabar ..	..	..	..	..	9	7,850	10	8,450	7	57	8	61	128	10,066	137	10,004	..	62
South do.	24	27,273	24	28,877	21	31,400	23	33,000	117	1,118	117	1,118	697	61,168	759	64,447	3,279	..
South Canara	20	3,208	22	7,533	..	..	..	..	320	1,149	456	1,213	901	6,496	1,201	11,477	4,981	..
Total ..	349	86,901	380	1,26,447	42	49,550	48	54,250	1,109	3,671	1,763	4,118	10,236	2,08,871	11,299	2,57,926	49,055	..
Grand Total ..	741	1,99,396	794	2,50,808	47	54,087	51	55,787	2,673	16,417	3,374	17,296	{ 22,951 miles. 13¼ cwt. 32·94 }	4,31,996	{ 25,534 miles. 13¼ }	4,93,641	61,645	..

• Collectors do not explain the variation between these and previous year's figures.

† Correct figures as now reported.

ANNUAL FORM No. 74.

Forest Department, Madras Presidency.

STATEMENT of Live-stock during 1893-94 (from 1st July 1893 to 30th June 1894).

PART I.

In possession of the reporting officers throughout the year.

District.	Names	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.	Rs. A. P.
	Elephants.			
South Coimbatore.	1. Sankara	28th June 1888. Received from North Malabar.	Per head ..	42 10 8
	2. Chloe	Do.		
	3. Karthiyayani	August 1888. Received from South Malabar.		
	4. Peria Rani	May 1889. Do.		
	5. Sinna Rani	9th August 1891. Do.		
	6. Abdul	Captured, 4th October 1891		
	7. Phyllis II	Captured, 25th September 1892.		
	8. Jumbu II	Do.		
Nilgiris ..	1. Latchmi	Transferred from the Anamalais on the 30th January 1882.	Do. ..	17 1 5
	2. Chinna Latchmi	Do.		
	3. Mabu Baksh	Born in January 1885		
	4. Akbar Baksh	Do. on 22nd February 1888		
	5. Meenatchi	Do. on 9th April 1889		
North Malabar ..	1. Phyllis	Purchased in January 1878	Do. .	43 0 9
	2. Peri	Captured in April 1889		
	3. Kalyani	Purchased in October 1889		
	4. Lallameah	Captured in March 1891		
	5. Cherry	Do. in May 1892.		
	6. Charlie	Do. in February 1893.		
South Malabar ..	1. Vixen	Transferred from Wynaad in 1882	Do ..	29 5 5
	2. Peyru	Do.		
	3. Samson	Purchased from Mr. Morgan in 1885.		
	4. Eva	Do.		
	5. Thebau	Captured on 3rd January 1886		
	6. Juno	Do. on 17th February 1886		
	7. Jupiter	Do. on 9th January 1887		
	8. Mars	Do. on 24th January 1887		
	9. Maharaj	Transferred from Wynaad in 1888-89.		
	10. Jembu	Do.		
	11. Gordon	Captured on 11th February 1889		
	12. Eddy	Do. on 10th February 1890		
	13. Mary	Do. on 31st March 1890		
	14. Loo	Do. on 24th April 1890		
	15. Hercules	Do. on 24th December 1890		
	16. Parvathi	Transferred from South Coimbatore in August 1891		
	17. Jessie	Captured on 10th December 1891		
	18. Tippu	Do. on 25th February 1893.		
	19. Maharani	Do. on 2nd March 1893.		
	20. Venus	Do. on 1st April 1893.		
	Other Cattle.			
North Malabar ..	Three bullocks	Purchased in May 1890 and in June 1892.	Do. ..	9 7 4

Statement of Live-stock during 1892-93—*cont.*

Part II.

Received during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.	
	Elephants.			Rs. A. P.
Ganjám	Captain Gunning ..	Purchased in July 1888. Transferred from the charge of the Conservator in January 1894. (Omitted to be shown in last year's return).	Per head ..	43 8 10
North Malabar ..	Bagavathi	Captured, on 27th June 1893	Do. ..	27 8 0
South Malabar ..	1. Alice	Transferred from South Coimbatore in December 1893.	Do. ..	19 7 10
	2. Pragasam		Do. ..	19 8 4
	3. Dora	Captured, 16th March 1894	Do. ..	56 6 7

Part III.

Gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.		How disposed of.
	Elephants.			Rs. A. P.	
Ganjám ..	Badamoti Guz	Transferred from the Gódávari district in 1891-92.	Per head ..	38 0 6	Sold to the Government Agent, Ganjám, for Rs. 4,000 in December 1893.
	Jung Bahadur				
Gódávari ..	Poun Guz	Purchased in July 1888 ..	Do. ..	42 10 8	Died on the 20th August 1893.
South Coimbatore.	1. Alice	Captured, 23rd September 1892.	Do. ..	42 10 8	Transferred to South Malabar in December 1893.
	2. Pragasam	Captured, 25th September 1892.			
	3. Cerise	Captured, 23rd September 1892.	Do. ..	..	Died in June 1893.
	4. Ranger				
South Malabar.	1. Flo	Born on 10th October 1892.	Do. ..	..	Died on the 18th October 1893.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), dated 7th December 1894, Forest No. 762 :—

Read—files of reports received from Collectors and Conservators on the progress of Forest Administraiion for 1893–94.

Resolution—dated 7th December 1894, Forest No. 762.

The Board begs to submit to Government the report on the progress of Forest Administration in the Madras Presidency for the year ending 30th June 1894.

2. The Board has interpolated a few remarks where they appeared called for in the portions of Chapters II and III relating to Demarcation and Working-plans and in Chapters IV and V which, as well as Appendix G, have been drawn up in accordance with the instructions issued in Board's Proceedings, Forest No. 529, dated 9th August 1894, by Mr. Peet, Acting Conservator of Forests, First Grade.

3. The late submission of the report is due to the inordinate delay on the part of the Collector of Madura whose report was not received till the 26th October 1894, in spite of several reminders and telegrams. The statistical returns, chiefly those relating to demarcation, were in several cases found to be inaccurate and revised returns had to be called for. Complete information for the compilation of the statistical returns was thus not available till the 7th November last.

(True Extract.)

(Signed) L. M. WYNCH,
Secretary.

To the Secretary to Government, Revenue Department.

ORDER—dated 22nd January 1895, No. 31, Revenue.

Forest No. 5.

With its Proceedings read above, the Board submits the Forest Administration Report for the Forest year 1893–94. The report was received in the Government office on December 8, the date prescribed for its submission being November 15, and the Government notes that the want of punctuality is ascribed to inordinate delay on the part of the Collector of Madura.

2. It is observed that the preparation of the main body of the report was this year entrusted to the Senior Conservator, and the duty has been well performed by Mr. Peet, who was in charge of the Central Circle during Mr. Popert's absence on leave. This method of preparation was suggested in paragraph 13 of the Government Order on last year's report, and the Government of India, while expressing its satisfaction at the proposed change, intimated that the Senior Conservator might with advantage deal with all technical subjects of importance. The necessary orders had been issued by the Board of Revenue before the receipt of the letter from the Government of India reviewing the report for 1892–93, and section 258 of the revised Forest Code now provides that such portions of the annual report as the Board may select should be drafted by the Senior Conservator. It is the intention of His

Excellency the Governor in Council that all technical subjects shall in future be reviewed by a professional officer, and it is hoped that the want of scientific criticism noticeable in previous reports may in this way be avoided. The present system is also open to objection on various other grounds, and its improvement is under further consideration.

3. The revised edition of the Forest Code has been approved by Government and came into force on January 1, 1895. The revised Code follows as closely as possible the latest edition of the India Forest Code (4th Edition), adopting also its general arrangement. The principal alterations introduced are in the matter of accounts, and an endeavour has been made to simplify the work in District Forest offices. The existing system undoubtedly throws a good deal of unnecessary labour on the district clerical establishments, which in any case are insufficient for the work required of them. The Board again draws attention to the urgent need for some improvement in this direction, as well as to the serious consequences involved by the inadequacy of the subordinate forest staff.

4. *Areas and boundaries.*—The areas under the control of the department at the commencement and at the close of the period under review are shown in detail in the statement appended to paragraph 9 of the report and are reproduced in abstract below :—

Class of lands.	Area on 1st July 1893.	Added during 1893-94.	Excluded during 1893-94	Net increase or decrease.	Area on 30th June 1894.
	SQ. MLS.	SQ MLS	SQ MLS	SQ. MLS	SQ. MLS
Reserved forests	9,436	(a) 1,353	3	+ 1,350	10,786
Do lands	7,751	(b) 864	1,391	— 527	7,224
Total ..	17,187	2,217	1,394	+ 823	18,010

(a) A net addition of 5 square miles due to rectification of areas
(b) Do 14 do. do.

5. The total area under control, as shown above, now covers 18,010 square miles, and is 34·7 *per cent.* of the whole extent of unoccupied lands at the disposal of Government. The maximum area that will eventually be reserved is estimated at 22,387 square miles; so that initial action has still to be taken in regard to 4,377 square miles of country. On this estimate the work remaining to be done is calculated as follows :—

	SQ.MLS.
Areas notified under section 4—settlement not completed or awaiting final notification under section 16	5,318
Areas reserved under section 26 but not yet notified under section 4	1,906
Areas not yet reserved but proposed for reservation ...	4,377
Total ...	11,601

The average area finally gazetted as reserved forest during each of the last four years is 1,763 square miles, and at this rate it will take between six and seven years to complete the work of forest settlement in this Presidency... It seems probable, however, that the total extent of land required for reservation has in some districts been over-estimated. The general principle is that, if other land is available for forest requirements, areas containing cultivable land, which the extension of cultivation would in the course of time bring permanently under the plough, are not to be enclosed.* It appears that in some cases this principle has not been kept in view, and in the Erode taluk of the Coimbatore district a very considerable area of cultivable land, which had been taken up under section 26 of the Act, has been recently set free for occupation. As the Government of India in its Circular Resolution No. 22-F., dated the 19th October 1894, clearly points out, "the claims of cultivation are," subject

Vide paragraph 7 of Government of India Resolution, dated 19th October 1894.

to certain specified conditions, "stronger than the claims of forest preservation." The Board has now been requested to ascertain whether similar mistakes have been made elsewhere, and to submit a general return of all cultivable lands proposed for reservation.

6. The area proposed for reservation may, moreover, require considerable modification in the light of the policy recently enunciated by the Government of India. In its review of the report for 1892–93, that Government remarked that "the adequacy or inadequacy of the proportion reserved in each district" appeared to require further examination. The Board was requested to bear this fact in mind when preparing the present report. The matter would seem to have been overlooked, for the question of the adequacy of reservation is not discussed, although a statement has this year been added to the report showing for each district the percentages of the area already under control and of the maximum area proposed for reservation. It is, however, impossible to institute any such examination until the vital question of the future policy of the department has been decided. The selections and proposals made during the last four years in each district have been framed upon the lines laid down in G.O., dated 29th October 1890, No. 844. In this order, His Excellency the Governor in Council set forth the principles on which the administration of the forests in the Madras Presidency was in future to be based, and the scheme has been fully carried into effect in some districts, whilst in all others final proposals for reservation are in course of preparation. The policy embodied in the Government of India Resolution of 19th October 1894, No. 22-F., and in the subsequent circular letter of the 31st idem, No. 24-F., coincides in its main principles with the Madras orders of October 1890, but some differences arise in regard to the method of carrying the policy into effect. The strict enforcement of the orders of the Government of India would involve the abandonment of large areas which have already been reserved for the purposes of supplying fuel and fodder or for grazing only, and proposals for further reservation would require to be entirely remodelled. To the adoption of such a course His Excellency the Governor in Council is strongly opposed, and a reference has been made to the Government of India, but, until final orders are received, it is not possible to assert that reservation in any district is either adequate or inadequate.

7. *Settlement.*—The actual outturn of forest settlement work as gauged by the number and area of reserves, for which final notifications were issued during the year, shows a great falling off, 197 blocks with an aggregate area of 1,350 square miles having been so gazetted, as against 284 blocks of 2,261 square miles during the previous 15 months. Moreover, at the close of 1892–93 there were 95 blocks of an aggregate area of 735 square miles already notified under section 16, though their reservation did not take effect until the following year, so that the area of reserves to be credited to 1893–94 is reduced to 615 square miles comprising 102 blocks: adding 44 blocks of 128 square miles notified in the year with effect from a date subsequent to 30th June 1894, the work of the year comes on this calculation to 146 blocks of a total extent of 743 square miles.

8. The Board deprecates any criticism of the work of Forest Settlement-officers being based on the actual area finally notified during any particular year, and it is clear that the value of such statistics is discounted by the fact that the notifications do not always take effect during the year of issue. The Government is not, however, prepared to admit that "the area constituted reserved forest in a given year affords no criterion of the work done by the Forest Settlement-officers." The work must be gauged by results, and although numerous particulars besides the size and number of blocks settled have to be taken into consideration (a fact which has been noted in several previous reviews), the area actually gazetted must form the basis of any comparison.

9. Judged by this standard, the progress of forest settlement work during 1893–94, as shown in paragraph 7 *supra*, was unsatisfactory. The results shown against Mr. Lever are particularly poor; a similar remark was made in last year's review, and the Government regrets to observe that there has been no improvement. As observed by the Board, but little progress has been made in the notification of the older blocks in any district, except Anantapur and Cuddapah. The figures given in

appendix A have been considerably modified and are presumably more correct than in previous years, but the form of the statement itself has been revised. The appendices are not prescribed by the Code and are inserted to elucidate the body of the report, but the same form should, as far as possible, be adopted year after year in order to facilitate comparison. The Government considers that more work should have been accomplished by Revenue Divisional officers. The Senior Assistant Collector, Ganjám, the Head Assistant Collectors, Vizagapatam, Coimbatore and South Canara, and all the Divisional officers in Malabar have apparently taken no steps to carry out the work entrusted to them. The Collectors of Ganjám and Vizagapatam were specially enjoined in paragraph 5 of last year's review to see that the work was taken in hand as soon as possible, and these officers will now be called upon for an explanation. It is possible that the time at the disposal of Revenue officers is insufficient to allow of very rapid progress, but this cannot account for the entire neglect of the work. The Board will now call on the Collectors of all the districts, shown in abstract F of the report, except the Nilgiris and Chingleput, for an explanation on this point and as to the steps they propose to take to hasten operations where the work is still in arrears.

10. *Demarcation.*—The following statement shows the outturn under the various classes of demarcation during the past three years :—

	1891-92	1892-93 (15 months).	1893-94.
	MLS.	MLS.	MLS.
Preliminary demarcation	1,864	2,627	3,482
Permanent demarcation	2,429	2,837	2,355
Re-clearing old lines	173	*	1,707
Total ..	4,466	5,464	7,544

* The work done was not shown in last year's returns.

The opening balances for 1893–94, as shown in abstract G, do not in all cases tally with the figures given in the report of the previous year, but the variations are not very large. This fact is satisfactory and tends to show that the statistics of demarcation, now furnished, are less untrustworthy than those given in 1891–92 and previous years. The average charges incurred on permanent demarcation vary enormously in the different districts, Kurnool coming first with a rate of Rs. 43 per mile, while in Gódávari, Bellary and Salem the rate was only Rs. 5 or less. This variation is not fully explained, and it is not stated whether the work done is commensurate with the requirements of administration. It is observed that fuller information on these points will be embodied in future reports. The average rate for all kinds of demarcation (excluding the re-clearing of old lines), calculated on the audited figures of expenditure, comes to slightly less than Rs. 5½ per mile, as against Rs. 13½ in the previous season: this large reduction in the cost and the increase in actual outturn of work are satisfactory.

11. *Surveys.*—This subject is dealt with in chapter III of the Board's report. The outturn of work recorded by the Survey of India party was satisfactory. The Government learns with regret that the boundary-traversing work in North Arcot was vitiated by the faulty nature of the demarcation Great care should be taken to avoid such mistakes in future, and the District officers should be called upon to certify to the general accuracy of the boundary marks before the survey of a reserve is started. Departmental survey has been separately reported upon and the Superintendent, Revenue Survey, who was consulted, has reported favorably upon the work done, but the Government notes that, in the opinion of the Conservators, the progress made was not satisfactory. The system adopted in the preparation of reserve maps is described in the Board's report. The instructions detailed in paragraph 27 have been embodied in section 81 of the revised Forest Code, and if these are carefully observed, the stock of forest maps should amply suffice for all requirements.

12. *Working Plans.*—The steps taken in the various districts towards the formation of working plans are detailed in paragraph 28 of the report, and as observed by

the Board, not much has yet been accomplished in this direction. It is however generally acknowledged that in Madras the preparation of scientific working plans must, except in a few isolated cases, await the completion of forest settlement, and on this understanding His Excellency in Council has accepted the provisions of the revised Code in regard to reserve books and forest journals. It is intended that the former record should in course of time contain a complete statistical history of the forest, or forests, to which it relates, whilst the latter provides for each officer in charge of a range a permanent note-book in which the results of his observations are from time to time to be recorded. Journals of this description are already being maintained under the old Code, but the reserve book takes the place of two registers formerly proscribed, and the object of the two amended records is to furnish materials for the eventual preparation of working plans. A special officer has been appointed to prepare a regular working plan for the Nilambúr Plantations, as the provisions of the preliminary scheme come to an end in March 1895.

13. *Forest offences.*—The following statement shows the number and disposal of cases during the year, as compared with the preceding season :—

	Number of cases for disposal.			Number of cases disposed of.				Number of acquittals.	Per centage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by Magistracy.
	Cases pending	New cases.	Total.	Withdrawn.	Compounded.	Dealt with by Magistracy.	Total.			
1892-93	1,656	10,905	12,461	696	4,106	5,676	10,478	1,218	39·2	21·5
1893-94	1,965	10,007	11,972	794	5,309	4,231	10,334	919	51·3	21·6

The district figures are very carefully analysed in the report, but the Board points out the difficulty of forming an opinion on this subject from the annual returns. The statistics of cases reported, withdrawn, compounded or prosecuted, and in the last instance the details of acquittals or convictions, are often very misleading and do not afford a firm basis from which the administration of the penal clauses of the Act can be reviewed. It is clear, however, from the steady and rapid rise * that has taken place during recent years, not only in the number of cases reported, but also in the amount of compensation realized from fees levied in compounded cases, that Forest-officers are year by year making more extensive use of the powers given to them by the Forest Law; and to a certain degree this may reasonably be expected since the longer the law is in operation and the better the people are acquainted with its provisions, the more strictly it may be enforced. The total amount of compensation money realized during 1893–94 was however more than double the amount levied four years previously, and was considerably larger than the corresponding sum recorded for the preceding season of 15 months. As the Board points out, the Collector and District Magistrate of each district is responsible for seeing that the law is worked with due consideration for the interests of the people. The large increase in the percentage of cases compounded and in the amount of compensation levied is, nevertheless, a matter of serious import. The dangers attaching to the system of compounding offences were indicated by the Government of India in reviewing the report for 1892–93. His Excellency the Governor in Council now resolves to reiterate the principles which should govern the exercise of this power. Cases in which the evidence does not appear to be strong enough to ensure conviction should be withdrawn altogether, and the power of compounding should be utilized only when the offence has clearly been committed by the individual in question, but prosecution is deemed to be inadvisable owing to the existence of special circumstances, such as the petty nature of the offence itself, ignorance of the law on the part of the offender, or distance of the scene of the offence

Year.	Number of new cases.	Amount of compensation realized.
		Rs.
1890-91	5,577	15,759
1891-92	8,124	27,385
1892-93 (15 months) ..	10,905	38,493
1893-94	10,007	37,595

from a Magistrate's Court. These principles were enunciated in the annual review for 1891–92, but the Government has reason to fear that they have not in all cases been carefully followed, and the attention of all officers concerned will again be drawn to the matter. It must further be borne in mind that delay in disposal is in itself very harassing to the parties concerned, and petty cases in which there has been long delay either in the institution of prosecutions or in the bringing of the offenders to trial should be withdrawn. The Government observes that in no instance was the power of compounding exercised by an officer below the rank of District Forest-officer, and desires that this practice should not be departed from in the future. It is noticeable that in the figures of 1893–94 a high percentage of acquittals does not in most districts follow a high percentage of cases compounded, so that the connection noted by the Government of India in the figures of 1892–93 is not repeated. The more serious cases are specially noticed in the Board's report; it is satisfactory that the outbreak of crime in the Cuddapah district remarked upon in last year's review does not appear to have been continued. The report called for from South Canara should on receipt be submitted for the information of Government. With reference to the Board's remarks in paragraph 35 on the subject of registers of forest offences, it is observed that the revised edition of the Forest Code provides the necessary forms (Nos. 41 and 41-A).

14. *Forest fires and fire-protection.*—The total area of which the protection was attempted during 1893–94 was almost the same as in the preceding year, and the percentage of success was 94 as against 95. The average cost per square mile was slightly more than Rs. 9; this rate cannot fairly be compared with that reported for the previous period, as the 15 months then under consideration covered two fire-seasons, but it is less than the corresponding figure for 1891–92 (Rs. 9·90), while the area attempted is larger. The report contains some interesting information on the causes to which the fires were attributed. The Board's remarks on the absence of fire-protection in the Sandur State are not understood and the Collector should be directed to submit a special report on the subject. The protection exercised during 1893–94 in other districts appears to have been generally satisfactory.

15. *Grazing.*—The revenue derived from grazing fees during the year under review is quite abnormal, being three-quarters of a lakh of rupees more than in any previous year. The figures for the last five years are given in the margin, that for 1892–93 representing the receipts for the twelve months ending with March 31, 1893. The increased receipts are doubtless the result of more efficient management, although in many districts the arrangements made for the control of grazing are reported to be still very imperfect; but the imperial policy recently enunciated aims more especially at the withdrawal, so far as may be practicable, of restrictions imposed on grazing and on the use of minor produce generally, and both the Board and the Conservators should devote their most careful attention to the principles laid down. The experiment in the constitution of separate and well-defined grazing areas, now being tried in the Kistna district, was sanctioned by Government with some hesitation, subject to the submission of an annual report on the progress made. The very rapid rise of grazing receipts in this district during the past year shows that the new system has already affected the revenue, and the Government looks to the Collector to see that the stricter control, now being exercised over the pasture lands, is necessary in the interests of the people. The Government is fully alive to the evils of the leasing system, which after a fair trial in the Kistna district was very properly abandoned, but the concurrent abuses of departmental working are noticed in the Resolution of the Government of India already referred to, and it remains to be seen whether the *parcelle* system can be permanently adopted. The Kistna and Nellore districts are peculiar, in that they contain on the plain country extensive areas of excellent pasture land, and the grazing is in great request with the cattle-owners of neighbouring districts; it is accordingly of much importance that these lands should be effectively protected, but it should be borne in mind that "grazing should not be looked upon primarily as a source of income," and the control of all pasture lands must be exercised with due regard to the satisfaction

	Rs.
1889–90	1,43,845
1890–91	1,50,015
1891–92	1,83,722
1892–93	1,75,589
1893–94	2,66,891

of local demands. The special attention of the Kistna district officers has already been called to the terms of the policy prescribed by the Madras Government in 1890,—a policy which in its main principles exactly coincides with that now enunciated by the Government of India,—and instructions have been issued to ensure the public being allowed the free use for grazing purposes of all Government lands not included within the boundaries of a reserved forest or of some area of which the eventual reservation is contemplated. The Government believes that in the Tinnevelly district grazing is being regulated on a system similar to that recently introduced into Kistna, and desires to receive a special report on the subject.

16. The variations in the figures for other districts are explained in the report. The very large increase of revenue under this head in North Arcot (Rs. 11,669 to Rs. 42,782) is said to be partly fictitious, as the fees levied in the previous year were in some cases credited in the returns of 1893–94. This explanation is not sufficient to account for so extraordinary an increase : in 1890–91 the grazing revenue of this district was shown as only Rs. 7,885, and in 1891–92 as Rs. 13,525. The question of discontinuing the practice of allowing free grazing to Toda buffaloes on the Nilgiris should be separately dealt with. The final decision upon the question of maintaining the distinction between agricultural and non-agricultural cattle has been held over pending receipt of certain information called for by Government, in regard to the allotment of free grazing to the former class of animals : the Board's report should be expedited. It may be noted that the revised edition of the Code prescribes an annual return to show the areas closed and open to grazing during the year : the form is copied from form 54 of the India Code, but the connected form 55 prescribed by the same Code, to show the fees levied for each class of animal and the details of free grazing allowed to each class, has not been adopted on the ground that it is not possible to furnish such detailed information with the present establishments.

17. *Reproduction.*—The details of the areas under cultural operations and the cost so incurred are given in abstract II. The headings of this statement were incorrectly entered in last year's report and the Government of India remarked that the average cost of plantations appeared to be much greater than in previous years. The Board has since explained that the figures in columns 5 and 7 of this return represent the cost, not only of planting up the new areas, but also of maintaining the existing plantations, and on this understanding the cost per acre up to 1892–93 comes to Rs. 58 approximately; a similar calculation of the charges including those incurred in 1893–94 shows an average rate of Rs. 59 per acre.* The Government has perused with interest the Conservators' notes on reproduction given in appendix G.

		Acs.
Area of plantations up to 1892–93		20,645
,, added during 1892–93		229
,, ,, 1893–94		425
	A	21,299

		Rs.
Cost up to 1892–93		11,67,788
Cost incurred during 1892–93		48,134
,, ,, 1893–94		38,764
	B	12,54,686

Cost per acre up to 1893–94 = $\frac{B}{A}$ = 58·9 or almost 59.

18. *Communications and buildings.*—The total expenditure under this head was Rs. 79,254, the percentage of outlay on the gross revenue being 4·08 as compared with 5·1, the corresponding figure for 1892–93. The large decrease in the expenditure on buildings and the increased outlay upon roads and bridges are satisfactory features in the year's report. The amount spent upon building operations in the Southern Circle was less than half the sum so spent in the previous season, and the Government is glad to observe that endeavours are being made to reduce the cost of buildings generally. The promised scheme for the development of forest communications has not as yet been submitted, and the consideration of this important subject should be taken in hand without delay. It is observed that the matter of forest camps is also under discussion. The long list of completed buildings appended to last year's report has been rightly superseded by a list showing only the new buildings constructed during the year. The Board has now prescribed a form for recording the capital and revenue accounts of tramways, and this has been inserted as form 65 in the revised Code. The returns for 1893–94 call for no special remarks, but it does not appear that, taken as a whole, these operations have up to date met with much success. It is hoped that the Sriharikota tramway will justify its working during the current year.

19. *Yield and working.*—The following statement gives the particulars of the yield of the forests during the last three years :—

	Timber including sandalwood in cubic feet.	Fuel in cubic feet.	Bamboos in number	Minor produce (gross value in rupees).
	C. FT.	C. FT.	NO.	RS.
1891–92	3,086,937	13,987,173	31,150,765	6,40,842
1892–93 (fifteen months)	2,966,556	12,138,565	20,779,393	8,03,255
1893–94	3,072,496	12,184,996	25,304,261	7,91,056
Net increase or decrease in 1893–94 as compared with 1892–93.	+ 105,940	+ 46,431	+ 4,524,868	— 12,199
Percentage of increase or decrease	+ 3·6	+ ·3	+ 21·7	— 1·5

The yield for the twelve months under review showed a perceptible increase over that for the fifteen months of 1892–93 under all heads except "minor produce," and making due allowance for the increase of about 5 per cent. in the area dealt with and for the decrease in the period reviewed, the results obtained in the year 1893–94 must be considered to be satisfactory. The comparison of the average approximate yield per square mile given in paragraph 49 of the Board's report is made between the figures of the twelve months of 1893–94 and those for fifteen months of 1892–93, but if the average for the twelve months of 1892–93 is taken, the yield per square mile during the latter period comes to be about 703 cubic feet of timber and fuel, 967 bamboos and Rs. 38 worth of minor produce as against 847 cubic feet, 1,405 bamboos and Rs. 44 respectively in 1893–94. The variations in the figures have on the whole been satisfactorily accounted for by the Board in paragraphs 50 to 55 of the report. As compared with the figures for 1891–92, however, the figures for 1893–94 showed a falling off under "timber," "fuel" and "bamboos," though under "minor produce" there was an increase of a little over Rs. 1,50,000. The increase in the revenue during 1893–94 over that of 1891–92 was about Rs. 2,50,000 or, excluding the amount credited to minor produce, Rs. 1,00,000. It is stated that a payment of Rs. 80,000 made in 1893–94 for railway sleepers in Ganjám was to "a great extent in the nature of an advance" and this amount has evidently helped to swell the difference between the receipts of the two years. It is also reported that in the departmental sales of forest produce the rates obtained for timber during the year under review in several districts were higher than in the previous year, and this fact must also be taken into consideration.

20. In paragraph 51, the Board compares the quantity and cost of the produce collected and disposed of by departmental agency in 1893–94 with the corresponding figures for 1892–93 and the variations are partly explained. The assertion at the close of the paragraph to the effect that "the cost of collection under all the heads is less except under timber, which is slightly more than in 1892–93" is incorrect, as the rate for sandalwood is shown as being Rs. 1–2–7 as against Rs. 1–0–8 in the previous season. In paragraph 52, the Board deals with the question of the head to which removals by contractors should be credited. The Government agrees with the Board in the views expressed upon this subject.

21. The cost of departmental and private working and the net profit under each system are compared in the statement appended to paragraph 53 of the report. The departmental working of timber and sandalwood as usual show a profit and that of minor produce for the first time appears on the same side, while in fuel there was a net loss of 2 pies per cubic foot as against 1 pie in the two previous years. In reviewing the administration report for 1892–93, the Government remarked that the figures relating to minor produce seemed to indicate the inadvisability of working such produce by Government agency, and the Board was called upon to submit a special report on the subject. This report has not as yet been submitted, and the Board should now attend to the matter, but it is observed that the profit evidenced by the last year's working somewhat alters the question. The Government is not aware whether there are grounds for supposing that the returns of future years will show a similar result. The profit in the departmental working of timber was double,

of bamboos treble, and of sandalwood about half of what it was in the previous year, and the Board should have furnished an explanation of these variations.

22. *Financial results.*—The subjoined statement gives the financial results of the fifteen months of 1892–93, of the twelve months ending 30th June 1893 and of the year under review :—

	Northern Circle.			Central Circle.		
	1892–93 (15 months).	1st July 1892 to 30th June 1893.	1893–94.	1892–93 (15 months).	1st July 1892 to 30th June 1893.	1893–94.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	4,54,069	3,79,720	6,04,314	8,83,599	7,39,254	7,76,451
Charges	3,66,236	2,98,208	3,26,719	6,15,342	4,78,897	5,35,276
Surplus or deficit	87,833	81,512	2,77,595	2,68,257	2,60,357	2,41,175
Increase or decrease during 1893–94 as compared with the preceding twelve months	+ 1,96,083			— 19,182		

	Southern Circle.			Total.		
	1892–93 (15 months).	1st July 1892 to 30th June 1893.	1893–94.	1892–93 (15 months).	1st July 1892 to 30th June 1893.	1893–94.
	8	9	10	11	12	13
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	6,48,150	5,29,706	5,62,950	19,65,818	16,48,680	19,43,715
Charges	6,77,350	5,64,471	5,06,416	16,38,928	13,41,576	13,68,411
Surplus or deficit	— 29,200	— 34,765	56,534	3,26,890	3,07,104	5,75,304
Increase or decrease during 1893–94 as compared with the preceding twelve months	+ 91,299			+ 2,68,200		

The revenue derived during the past year was the highest recorded for any year of twelve months since the inauguration of the Forest Department, and the surplus of receipts over expenditure was also the highest on record. The following statement compares the financial results of the past five years :—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1889–90	15,87,627	11,65,358	3,92,269
1890–91	17,95,408	12,53,284	5,42,124
1891–92	16,94,215	12,66,154	4,28,061
1892–93 (fifteen months)	19,65,818	16,38,928	3,26,890
Twelve months ending 30th June 1893 ..	16,48,680	13,41,576	3,07,104
1893–94	19,43,715	13,68,411	5,75,304

The variations in the figures for the year under review, as compared with those for the previous twelve months, are concisely set forth in paragraph 56 of the Board's report and call for no special remarks. It may, however, be noted that so far as receipts are concerned, the year 1893–94 appears to have been somewhat abnormal.

23. *Conclusion.*—The results achieved during the year 1893–94 may be regarded as very satisfactory. The revision of the Forest Code and of the rules under section 26 of the Forest Act will tend to simplify the despatch of business generally; the Senior Conservator, Mr. Popert, rendered valuable assistance in the disposal of the Code revision which has long been pending, and the thanks of Government have been accorded to

him. The district inspection of all the three Conservators appears to have been good. The special grazing scheme worked out by Mr. A. W. Lushington for the Kistna district has already been noticed in paragraph 15 *supra*. His Excellency the Governor in Council desires that future reports should embody the opinions of Conservators on the work of District Forest-officers; the general remarks contained in paragraph 63 of the present report do not appear to be of much value. The Government notes the Board's remark in paragraph 30 of the report to the effect that owing to the delay in sanctioning the scheme for the re-organization of the subordinate staff, promotion in the lower ranks of the service is very slow and that "there is a feeling of hopelessness which is not conducive to efficiency." The delay is much to be regretted, for the subordinate establishments are admittedly inadequate, and although the general financial pressure renders the increase of any expenditure a matter of serious consideration, His Excellency the Governor in Council believes that the proposals submitted to the Government of India in March 1894 represented the smallest possible establishment compatible with efficient management.

(True Extract.)

(Signed) G. S. FORBES,
Ag. Secretary to Government.